# Cottam Solar Project

# Environmental Statement: Appendix 8.3 Potential Visual Effects Revision B - Change Application

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APFP Regulation 5(2)(a)





# **Schedule of Changes**

Figure Reference	Page	Description of Changes	Reason for Revision
C6.3.8.3.4.3.16	589-592	Update to text and assessment to take account of proposed Change 5	Change Application
C6.3.8.3.4.3.18	597-600	Update to text and assessment to take account of proposed Change 5	Change Application

All other changes made to text and to tables are shown as tracked changes.

Viewpoint	Location	Bumble Bee Farm	Field Farm	Gate Burton Energy Farm	High Marnham Solar	Tillbridge Solar	West Burton	Potential Intervisibility	Potential Intervisibility Justification
1	Tillbridge Lane	N	Y	Y	Y	Y	Y		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
2	Scmp/195/2								Already Scoped Out
3	Scmp/31/1								Already Scoped Out
4	Thorpe Lane, Local Bridge	N	N	N	N	Y	Y	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 4 at Local Bridge in Thorpe Lane, with the closest West Burton Site being approximately 1.6km to the south, views to the development is closed down by the intervening field hedgerows and the vegetation bordering Tillbridge Lane in the distance. Similarly, Tillbridge Solar is approximately 5.8km to the north of the viewpoint and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
5	TLFe/31/2	N	N	Y	N	Y	Y	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 5 at PROW TLFe/31/2, with the closest West Burton Site being approximately 1.5km to the south, views to the development is closed down by the intervening field hedgerows and the vegetation bordering Tillbridge Lane in the distance. Similarly, Tillbridge Solar is approximately 5.75 km to the north of the viewpoint and therefore has no potential intervisibility. Finally, Gate Burton Energy Farm is approximately 5.1km to the northwest of the viewpoint and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
6	Thorpe Lane	N	N	Y	N	Y	Y	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 6 at Thorpe Lane, with the closest West Burton Site being approximately 1.6km to the south, views to the development is closed down by intervening field hedgerows and the vegetation bordering Tillbridge Lane in the distance. Similarly Tillbridge Solar is approximately 5.7km to the north of the viewpoint and therefore has no potential intervisibility. Finally, Gate Burton Energy Farm is approximately 4.75km to the northwest of the viewpoint and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
7	TLFe/32/1	N	N	N	N	Y	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 7 at PROW TLFe/32/1, with the closest Tillbridge Solar site being approximately 6km to the northeast of the viewpoint and therefore has no intervisibility. No views of cumulative developments -Scope Out.
8	Stur/80/1	N	N	N	N	Y	N		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
9	Fleets Road, Stur/79/1								Already Scoped Out

Viewpoint	Location	Bumble Bee Farm	Field Farm	Gate Burton Energy Farm	High Marnham Solar	Tillbridge Solar	West Burton	Potential	Potential Intervisibility Justification
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10	Stur/73/1	N	N	N	N	Y	Y	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 10 at PROW sTUR/73/1, with the closest West Burton Solar site being 2.5km to the southeast, views to the development is closed down by intervening field hedgerows and the vegetation bordering Tillbridge Lane. Similarly, Tillbridge Solar is approximately 5.5km to the north east of the viewpoint and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
11	TLFe/31/2	N	N	Y	N	Y	Y	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 11 at PROW TLFe/31/2, with the closest West Burton site being 2.15km to the south, views to the development is closed down by intervening field hedgerows and the vegetation bordering Tillbridge Lane. Similarly, Tillbridge solar is approximately 5.10km to the north and therefore has no potential intervisibility. Finally, Gate Burton Energy Farm is approximately 4.7km to the northwest of the viewpoint and therefore has no intervisibility. No views of cumulative developments - Scope Out.
12	Camm/31/1	N	N	Y	N	Y	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Speceifically with viewpoint 12 at PROW Camm/31/1, the closest Tillbridge Solar site is approximately 4.4km to the north of the viewpoint and therefore has no potential intervisibility. Similarly, Gate Burton Energy Park is approximately 4.45km to the northwest of the viewpoint and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
13	Fleets Lane, Stow Pasture	N	N	N	N	Y	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 13 at Stow Pasture on Fleets Lane, with the closest Tillbridge Solar site is approximately 4.75km to the northeast of the viewpoint and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
14	Ingham Road	N	N	Υ	N	Y	Y		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
15	Squire's Bridge	N	N	Y	N	Y	Y	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with Viewpoint 15 at Squire's Bridge, the closest West Burton site is approximately 3.33km to the southeast, views to the development is closed down by the intervening field hedgerows and the vegetation bordering Tillbridge Lane in the distance. Similarly, Tillbridge Solar is approximately 4.2km to the northeast and therefore has no potential intervisibility. Finally, Gate Burton Energy Farm is approximately 3.3km to the nrothwest of the viewpoint and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
16	Bridleway Camm/31/1 and Ingham Road, Furze Hill	N	N	Y	N	Y	Y		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
17	Stow/83/1	N	N	N	N	N	N		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
18	St Edith's Church and Coates Hill	N	N	N	N	Y	Y		Cottam 1 is not visibile therefore no potential cumulative intervisibility.

Viewpoint	Location	Bumble Bee Farm	Field Farm	Gate Burton Energy Farm	High Marnham Solar	Tillbridge Solar	West Burton	Potential Intervisibility	Potential Intervisibility Justification
19	Bridge over River Till	N	N	N	N	N	N	No	No views of cumulative developments - Scope Out.
20	Normanby Road	N	Y	Y	Y	Y	Y	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 20 at Normanby Road, the viewpoint is approximately 4.82km to the closest Tillbridge Solar Site and over 10km to the closest Field Farm Site and High Marnham Solar Scheme and therefore has no potential intervisibility to these Sites. The viewpoint is approximately 1.1km to the closest site at Gate Burton Energy Farm (northwest of viewpoint), however, due to the thick hedgerow and strong vegetation combined with the built form associated with West Farm. the development cannot be seen and therefore has no potential intervisibility. The closest West Burton Solar site is approximately 2.25 km to the southwest, however due to the distance and built form associated with the settlement of Stow the site is not visible and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
21	Stow/83/1	N	N	Y	N	Y	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 21 at PROW Stow/83/1 being approximately 5.3km from the closest Gate Burton site and therefore has no potential intervisibility. Similarly, the closest Tillbridge Solar site is 3km from the viewpoint and therefore due to the distance has no potential intervisibility to these sites. No views of cumulative developments -Scope Out.
22	Ingh/27/5	N	N	N	N	Y	Y		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
23	Ingh/27/5 and Ingham Road	N	N	Y	N	Y	N		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
24	B1398								Already Scoped Out
25	Stow Lane and Lincoln Road Crossroads								Already Scoped Out
26	Ingh/24/2								Already Scoped Out
27	Junction of Church Hill and the B1398								Already Scoped Out
28	Junction of Ingh/18/2, Ingh/18/1, Ingh/17/1 and Ingh/17/2								Already Scoped Out
29	Ingh/17/2 just off of B1398:	Υ	Υ	Υ	N	Y	Y		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
30	Junction of High Street and the B1398	Y	Υ	Y	Y	Y	Y		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
31	Fill/87/1 Just of Willingham Road								Already Scoped Out
32	Fill/86/1	N	N	Y	N	Y	Y	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 32 at PRoW Fill/86/1 being approximately 1.9km from the closest Tillbridge Solar site however due to the densley planted vegetation surrounding Willingham Road the site is not visibile and therefore has no potential intervisibility. The closest Well Burton site is approximately 6.9km from the viewpoint and the closest Gate Burton site is approximately 6.3km from the viewpoint and therefore has no potential intervisibility into these two developments. No views of cumulative developments - Scope Out.
	Fill/86/1 off Willingham Road	N	N	Y	N	N	Y		Cottam 1 is not visibile therefore no potential cumulative intervisibility.

Viewpoint	Location	Bumble Bee Farm	Field Farm	Gate Burton Energy Farm	High Marnham Solar	Tillbridge Solar	West Burton	Potential Intervisibility	Potential Intervisibility Justification
34	Fill/85/2	N	N	Y	N	Y	Y		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
35	Junction of Fill/85/1, Fill/85/2 and Fill/767/1	N	N	N	N	Y	N		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
36	Fill/767/1	N	N	N	N	Y	N	Yes	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 36 at Fill/767/1 being 0.8km from the closest Tillbridge Solar Site the development could be visible in the distance.
37	Junction of Gypsy Lane and Fillingham Lane	N	N	N	N	Y	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 37 at Junction of Gypsy Lane and Fillingham Lane being apprimately 1.6km Tillbridge Solar however views are closed down by Turpin Wood and Fillingham Low Wood. No views of cumulative developments -Scope Out.
38	South Lane	N	N	Y	N	Y	Y		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
39	Junction of Cot Garth Lane and Stone Pit Lane	N	N	Y	N	N	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 39 at junction of Cot Garth Lane and Stone Pit Lane being 1.6km to closest Gate Burton Solar Site. The view is closed down by strong hedgerow to the western side of Stone Pit Lane, built form associated with Woods Farm and the settlement of Willingham by Stow closes down views to the Gate Burton Solar scheme and therefore has no potential intervisibility. No views of cumulative developments -Scope Out.
40	Junction of Fillingham Lane and								Already Scoped Out
41	Stone Pit Lane  Gltw/85/1 just off Kexby Road		N	N	N	Y	Y		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
42	Gltw/88/1								Already Scoped Out
43	Owmb/5/2 just off A15								Already Scoped Out
44	Junction off School Lane and Chapel	N	N	N	N	Y	N		Cottam 2 is not visibile therefore no potential cumulative intervisibility.
45	Lane A361	N	N	N	N	Y	N		Cottam 2 is not visibile therefore no potential cumulative intervisibility.
46	Corringham Windmill	N	N	Y	N	Y	N		Cottam 2 is not visibile therefore no potential cumulative intervisibility.
47	Junction of Mill Mere Road and Pilham Lane								Already Scoped Out
48	East Lane	N	N	N	N	N	N		Cottam 2 is not visibile therefore no potential cumulative intervisibility.
49	East Lane	N	N	N	N	Y	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 49 at East Lane being approximately 1.3km to the closest Tillbridge Solar Site. Due to the distance, interveing field hedgerows and vegetation surrounding A631, the development will not be visible in view and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
50	Yawhthorpe	N	N	N	N	Y	N		Cottam 2 is not visibile therefore no potential cumulative intervisibility.

Viewpoint	Location	Bumble Bee Farm	Field Farm	Gate Burton Energy Farm	High Marnham Solar	Tillbridge Solar	West Burton	Potential Intervisibility	Potential Intervisibility Justification
51	wltn/13/1								Already Scoped Out
52	Pilham Lane								Already Scoped Out
53	Corr/22/1								Already Scoped Out
54	Bonsdale Lane just north of Corringham Beck	N	N	N	N	N	N		Cottam 2 is not visibile therefore no potential cumulative intervisibility.
55	Pilham Lane	N	N	Y	N	Y	N		Cottam 2 is not visibile therefore no potential cumulative intervisibility.
56	Pilh/20/1	N	N	N	N	Y	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 56 at PRoW Pilh/20/1 being approximately 3.2km away from the closest Tillbridge Solar site, however, due to built form associated with Pilham and Corringham combined with the distance, closes down the views and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
57	Bonsdale Farm	N	N	Y	N	Y	N		Cottam 2 is not visibile therefore no potential cumulative intervisibility.
58	Junction of Pilh/20/1 and Bonsdale Lane	N	N	Y	N	Y	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 58 at junction of Pilh/20./1 and Bonsdale Lane being approximately 3.6km from Tillbridge Solar and 8.75km to the closest Gate Burton Solar Site and therefore has no potential intervisibility due to the distance. No views of cumulative developments - Scope Out.
59	Blyton Level Crossing	N	N	N	N	Y	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 59 at Blyton Level Crossing being 4.3km from the closest site at Tillbridge Solar, however, due to the distance combined with intervening field hedgerows and vegetation associated with Bonsdale Farm the scheme is not visible and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
60	B1025 (Kirton Road)	N	N	N	N	Y	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 60 at Kirton Road being approximately 4.7km from the closest Tillbridge Solar site. Due to distance and vegetation associated with the railway the development is not in view and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
61	B1025 (Kirton Road)	N	N	Y	N	Y	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 61 at Kirton Road being approximately 4.7km from the closest Tillbridge Solar site and approximately 9.9km to the closest Gate Burton Solar site. Due to the distance and intervening hedgerows both schemes are not visible and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.

Viewpoint	Location	Bumble Bee Farm	Field Farm	Gate Burton Energy Farm	High Marnham Solar	Tillbridge Solar	West Burton	Potential Intervisibility	Potential Intervisibility Justification
62	B1025 (Kirton Road)	N	N	N	N	Y	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area od theoretical visibility could be zero. Specifically with viewpoint 62 at Kirton Road being approximately 4.2km away from the closest Tillbridge Solar site. Due to distance combined with the built form associated with the settlements of Pilham and Corringham and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
63	A159 (Laughton Road)	N	N	N	N	N	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint 63 at A159 there are no views of any developments due to the distance from the viewpoint to the developments and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
64	A159 (Laughton Road)								Already Scoped Out
65	Scotton Common Nature Reserve								Already Scoped Out
66	Nthp/504/1	N	N	N	N	N	N		Cottam 3 is not visibile therefore no potential cumulative intervisibility.
67	Monson Road	N	N	N	N	N	N		Cottam 3 is not visibile therefore no potential cumulative intervisibility.
LCC-C-A	Ingham Road	N	N	N	N	Y	N		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
LCC-C-B	PROW Stur/72/3								Already Scoped Out
LCC-C-C	PROW Stur/73/1	N	N	N	N	Υ	N		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
LCC-C-D	Blackthorn Lane	N	N	Y	N	N	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint LCC-C-D at Blackthorn Lane being approximately 6.3km to the closest Gate Burton Solar site. Due to the distance and intervening vegetation such as Normanby Gorse the view is closed and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
LCC-C-E	PROW Ingh/27/2	N	Y	Y	N	Y	Y		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
LCC-C-F	PROW Ingh/24/1	N	N	Y	N	Y	N		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
LCC-C-G	PROW Fill/85/2	N	N	Y	N	Y	Y	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint LCC-C-G at PROW Fill/85/2 being approximately 5.6km away from the closest Gate Burton Solar site whereas the viewpoint is approximately 6.5km away from the closest West Burton Solar Site. Both being further than 5km limits views and therefore has no visibility. The viewpoint is approximately 1.45km away from the closest Tillbridge Solar site, however, due to distance and vegetation surrounding small drains and tributeries the view is closed down and limited this having no potential intervisibility. No views of cumulative developments - Scope Out.

								Potential	
Viewpoint	Location	Bumble Bee Farm	Field Farm	Gate Burton Energy Farm	High Marnham Solar	Tillbridge Solar	West Burton	Intervisibility	Potential Intervisibility Justification
LCC-C-H	PROW Fill/767/1	N	N	N	N	Y	N	Yes	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint LCC-C-H at PRoW Fill/767/1 being approximately 1.5km to the closest Tillbridge Solar site. Due to the proximity and the lack of dense vegetation the scheme will be visibile and therefore will have potential intervisibility. Views of cumulative developments
LCC-C-I	Willingham Road	N	N	N	N	Y	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint LCC-C-I at Willingham Road being approximately 1.2km away from the closest Tillbridge Solar Site however, due to distance and existing vegetation such as Fillingham Low Wood closing down the view and thus having no potential intervisibility. No views of cumulative developments - Scope Out.
LCC-C-J	Fillingham Lane	N	N	Y	N	N	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. Specifically with viewpoint LCC-C-J at Fillingham Lane being approximately 3.09km from the closest Gate Burton Solar Site, however due tot he built form associated with the settlement of Willingham by Stow the view is closed down and disrupted and therefore has no potential intervisibility. No cumulative developments - Scope Out.
LCC-C-K	Fillingham Lane	N	N	N	N	Y	Y		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
LCC-C-L	B1398								Already Scoped Out
LCC-C-M	Kexby Road	N	Y	Y	N	Y	Y		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
LCC-C-N	Glentworth Road	N	N	Y	N	N	Y		Cottam 1 is not visibile therefore no potential cumulative intervisibility.
LCC-C-O	Glentworth Road								Already Scoped Out
LCC-C-P	Corringham Beck	N	N	N	N	Y	N		Cottam 2 is not visibile therefore no potential cumulative intervisibility.
LCC-C-Q	Junction at Temple Field Road and Yawthorpe Road								Already Scoped Out
LCC-C-R	A159								Already Scoped Out
LCC-C-S	PRoW Blyt/24/2								Already Scoped Out
LCC-C-T	Kirton Road	N	N	N	N	N	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topography the area of theoretical visibility could be zero. There are no views towards any other developments therefore has no potential intervisibility. No cumulative developments - Scope Out.
LCC-C-U	PROW Blyt/32/1								Already Scoped Out
LCC-C-V	Dring Lane								Already Scoped Out
LCC-C-W	Northorpe Road								Already Scoped Out
LCC-C-X	Scotton Nature Reserve								Already Scoped Out



# Viewpoint: LCC - C - B - ProW Stur/72/3

# **Receptor Baseline:**

This view is located on PRoW, footpath Stur/72/3, looking east towards the western extent of the Cottam 1 South Site/Sites.

<u>Objective:</u> This viewpoint offers views over a low-lying almost flat landscape within the wider context of a broad vale, which is conspicuous in the view. The landform then rises sharply to capture the ridgeline at Cammerigngham and Brattleby in the east. The landform also rises gently in the west towards the edge of Sturton by Stow rising from 15m AOD to 20m AOD in the central part of the settlement. The land use is predominantly arable with some deciduous woodlands and shelterbelts in the far distance, such as those to the east of Fleets Lane at Brattleby Thorns and Cammeringham. In terms of man-made features, there is very little built influence and settlement is very sparse comprising of scattered farmsteads at Furze Hill, Lower Furze Hill and The Grange. There are also isolated dwellings known as Fleets Cottages which stand out as a strong built influence, in an otherwise open landscape with little settlement.

<u>Subjective:</u> The view depicts a large-scale, open landscape, being exposed with few areas of enclosure, and with far-reaching views toward the Lincoln Minster. There are also views towards the limestone capped ridgeline at Cammeringham and Brattleby where the woodland cover is a strong feature on the horizon. In terms of variety, the combination of landscape features includes farmsteads, churches, woodland, hedgerows and hedgerow trees that presents a varied and harmonious composition. In terms of texture, the arable fields are highly managed with a muted colour combination giving an impression of an ordinary landscape, but this is balanced in terms of interest by the far reaching, but rare views towards Lincoln.

<u>Overall:</u> The view is influenced by the open arable landscape where the loss of hedgerows has impacted upon scale. However, this is a quiet location at the settlement edge of Sturton by Stow due to the absence of settlement and busy roads, and only a few local lanes such as Fleets Lane and Thorpe Lane. The overall experience is a pleasant and invigorating comprising a view from a quiet location at the edge of the settlement.

#### Receptors

This viewpoint is representative of views available to PRoW users along footpath Stur/72/3. This is the section of the footpath that leads from the north at Ingham Road in Stow, past Old Rectory Farm and Mill House towards Sturton by Stow in the south where the footpath joins with Fleets Road.

Replace with alternative Viewpoints LCC-C-A and LCC-C-C, which provide a similar view.

Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable



Viewpoint: LCC-C-L - B1398

# **Receptor Baseline:**

This viewpoint is located on the B1398 (Middle Street) looking southwest towards the Cottam 1 North Site/Sites with Cottam 1 South beyond.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, experienced from the Limestone Scarps and Dipslopes Character Area 6a. The view comprises of a very gently rolling landscape within the context of a broad valley that is almost conspicuous at this location. The land use is predominantly arable with mixed woodland visible to the northwest (left of view) comprising of Nursery Plantation and Hanoverhill Plantation, and to the south woodland cover on the far horizon at Fillingham Grange and The Lake, and Fillingham is a strong dark feature. The intervening woodland and settlement at Fillingham also closes down views towards the south. The views towards the far horizon are curtailed by the landform in the foreground. Tree clumps are also a feature along the hedgerow boundaries, which enhance the existing woodlands and give the impression of a more intimate landscape. In terms of man-made elements, the B1398 has the main influence where it passes along the ridgeline in a long, straight alignment with fast moving traffic.

<u>Subjective:</u> The viewpoint depicts a medium to large-scale, partially open landscape, with views closed down by a wooded horizon in some locations. The intensive arable land use opens visibility, but the landform and strong hedgerows with tree clumps help to dissipate the scale. In terms of variety, the combination of features includes woodland, tree clumps and hedgerows that present a simple landscape with very limited interest. In terms of texture, this is a highly managed arable land use with a muted colour combination and some far-reaching views towards the west.

Overall: The B1398 is partially enclosed as it heads along the scarp slope between the settlements of Glentworth and Fillingham. The main feature is the extended views towards the west which capture the River Trent set within the Floodplain Valleys Landscape Character Area 3a. The immediate view is typical of the local landscape character, but the far-reaching open views offer more interest. The overall experience is pleasant but with some bland foreground features. The scale of the view is vast and open with a variety of landscape elements that add complexity. The open arable landscape and woodlands provide an overall balanced and attractive landscape. The experience within this viewpoint is invigorating and pleasant, but with the B1398 being a detractor.

#### **Receptors:**

The viewpoint is representative of views for users of the B1398 traveling between the settlements of Glentworth and Fillingham.

Scope Out

Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable



# **Viewpoint: LCC-C-O - Glentworth Road**

# **Receptor Baseline:**

The view is located on Glentworth Road at the eastern edge of the settlement of Kexby, looking southeast towards the northern extent of the Cottam 1 Site/Sites.

Objective: This viewpoint offers views of an almost flat landscape within the wider context of a rolling lowland. Glentworth Road is a prominent feature as this stretch is a long, straight route point that connects the settlements of Kexby with Glentworth. The land use is predominantly arable with some distinctive tree and woodland cover at the edge of the settlement. There are clear and uninterrupted views to the southeast (left of view) towards Primrose Farm and Primrose Farm Cottage, but long-distance views to the south are limited due to the intervening settlement of Willingham Lane is also visible on the horizon to the south by the presence of hedgerow trees and tree clumps to each side of the road. There are also wide grass verges that separate the Glentworth Road from the hedgerows and this is a key feature of the road at this location.

<u>Subjective:</u> The scale of the view is medium and enclosed in parts due to the tall hedgerows that line both sides of Glentworth Road. The enclosed nature of the road is appealing and provides for a balanced and attractive environment at the edge of the settlement. Glentworth Road has some fast-moving traffic however due to its straight alignment. In terms of texture, the hedgerows are well-managed and there are strong colours due to the presence of the tree cover at the settlement edge and a varied arable land use.

Overall: The experience is interesting with pleasant views; however the road has some fast moving traffic.

# **Receptors:**

This viewpoint is representative of views available to motorists and residents at the eastern edge of the settlement of Kexby when travelling along Glentworth Road towards the settlement of Glentworth in the east.

There are no meaningful views towards the Site/Sites due to the distance and intervening hedgerows, woodland cover and tree clumps.

Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable



# Viewpoint: LCC-C-Q - Junction at Temple Field Road and Yawthorpe Road

# **Receptor Baseline:**

The view is located at the junction with Templefield Road and Yawthorpe Road, looking northwest towards the southern extent of the Cottam 2 Site.

Objective: This viewpoint offers views of a gently undulating landscape within the context of a broader rolling valley that is conspicuous at this location due to the higher landform (approximately 20m AOD) at this junction. The land use is predominantly arable with the large deciduous woodland of Yawthorpe Fox Covert visible on the horizon to the north. There are a variety of other woodland blocks including the small copses around the settlement of Yawthorpe and smaller woodlands further to the east at Willhoughton. In terms of man-made elements, there are residential dwellings at Moorlands Magin Moor to the south, otherwise the immediate area is sparsely settled comprising other isolated dwellings and the small hamlet of Yawthorpe.

<u>Subjective:</u> The viewpoint depicts a large-scale, open landscape, being exposed due to the large field sizes and lack of hedgerows and tree cover. In terms of variety, the combination of features includes isolated dwellings, Yawthorpe Fox Covert, tree clumps, hedgerows and hedgerow trees, and the gently rising landform where Yawthorpe occupies higher ground. In terms of texture, this is an intensely managed landscape with an arable dominance and a combination of colours owing to crop variety and the various woodland blocks.

<u>Overall:</u> The A361 is a prominent feature and although the foreground hedgerows provide some visual relief from the fast-moving traffic the noise is a notable detractor. The immediate view is typical of local landscape character being large scale and arable dominant, but woodland at Yawthorpe Fox Covert and riparian trees lining Yawthorpe Beck add some vigour and interest to the view. The woodland around Yawthorpe also compliments the landscape setting of Home Farm, which is an attractive feature. The overall experience provides a balanced landscape with some distractions from the A361, but the views are very pleasant and invigorating.

# **Receptors:**

This viewpoint is representative of views available to motorists using Yawthorpe Road that leads from the A361 in the south. The view is a location where Yawthorpe Road takes a slight turn in direction and views are revealed across the junction with Temple Field Road towards the landscape around Corringham and Springthorpe. There are no meaningful views towards the Site/Sites due to distance, topography and intervening hedgerows.

Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable



# **Viewpoint: LCC-C-R - A159**

# **Viewpoint Baseline:**

The view is located along the A159 (Gainsborough Road) at the bridge crossing over the mainline railway, looking northeast towards the Cottam 3b Site/Sites.

<u>Objective:</u> This viewpoint offers views of an almost flat landscape within the context of a wider gently rolling lowland that is hardly conspicuous at this location. The land use is a mixture of arable and pasture interspersed with strong woodland blocks and sinuous shelterbelts. In terms of man-made features, the railway line and over bridge are dominant, urban features and Gainsborough Road is busy with fast-moving traffic at this location. Telephone wires and poles also cut across the open fields and electricity pylons are also a distraction on the far horizon.

<u>Subjective:</u> The viewpoint depicts a large-scale, open landscape that is exposed due to the lack of hedgerows in the foreground or hedgerows that are cut back. Shelterbelts and tree clumps are visible in the middle distance of the view and the far horizon is lined with strong woodland cover. In terms of variety, the combination of features includes farmsteads, low hedgerows, small woodland blocks, shelterbelts, tree groups and field trees. In terms of texture, this is highly complex landscape with a variety of colour and unsettling interventions such as power lines, telegraph poles and isolated dwellings without the benefit of tree cover.

Overall: The open, arable landscape gives a harsh appearance to the view, but the deciduous woodland blocks and vegetation along the railway line are also very prominent and attractive features in the landscape. This is an interesting view that is far-reaching with a complex mixture of elements including the prominent vegetation cover to each side of the railway line.

# **Receptors:**

This viewpoint is representative of views available to walkers, motorists and residents travelling along the A159 (Gainsborough Road). There are no meaningful views towards the Site/Sites due to distance, intervening settlement at Pilham, woodlands, shelterbelts and the vegetation bordering the mainline railway.

Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable



# Viewpoint: LCC-C-S - ProW Blyt/24/2

#### **Viewpoint Baseline:**

The view is located on the PRoW, footpath (Blyt/24/2), at the pedestrian crossing to the mainline railway, looking northeast towards the Cottam 3a and 3b Site/Sites.

<u>Objective:</u> This viewpoint offers views of an almost flat landscape within the context of a wider gently rolling lowland that is hardly conspicuous at this location. The land use is a mixture of arable and pasture interspersed with strong woodland blocks and sinuous shelterbelts. In terms of man-made features, the railway line is dominant, and the edge of Blyton settlement also forms a harsh edge with the fields to the south due to lack of tree cover at the settlement edge. Station Road also exerts a dominant influence and the electricity sub-station on Pilham Lane also stands out in the landscape due to there being limited tree cover. Telephone wires and poles also cut across the open fields and electricity pylons are also a distraction to the south.

<u>Subjective:</u> The viewpoint depicts a small-scale, landscape that is enclosed due to the abundance of vegetation along the mainline railway and the small triangular copse at the crossing over the railway. Shelters belts and tree clumps are visible in the foreground of the view and the edge of Pilham is lined with strong woodland cover. In terms of variety, the combination of features includes abundant hedgerows, small woodland blocks, shelterbelts, tree groups and field trees. In terms of texture, this is an attractive landscape with an interesting mix of colour due to the benefit of tree cover and varied agricultural uses.

<u>Overall:</u> This is an enclosed landscape that supports numerous hedgerows with strong tree cover all of which gives an attractive appearance to the view. The deciduous woodland blocks and vegetation along the railway line are also very prominent and attractive features in this landscape. This is an interesting view that is enclosed and intimate with a complex mixture of attractive features including the prominent vegetation cover to each side of the railway line.

#### Receptors

This viewpoint is representative of views available to walkers using the footpath (Blyt/24/2). There are no meaningful views towards the Site/Sites due to distance, intervening settlement at Pilham, woodlands, shelterbelts and the vegetation bordering the mainline railway.

Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable



# Viewpoint: LCC-C-U - ProW Blyt/32/1

# **Viewpoint Baseline:**

The view is located on PRoW, footpath (Blyt/32/1), just to the west of the Grace Park Caravan and Camping site, looking east towards the Cottam 3a Site/Sites.

<u>Objective:</u> This viewpoint offers views of a slightly undulating landscape within the context of a wider Wooded Vale that is quite conspicuous at this location. The land use is a mixture of arable and pasture interspersed with strong woodland blocks and sinuous shelterbelts. In terms of man-made features, Laughton Road is a dominant along with the caravan and camping site and the sewage works site. The edge of Blyton settlement is also visible to the south where it forms an attractive edge with the fields to the north due to abundance of tree cover. The settlement occupies a broad spur that extends to the northwest and rising to approximately 25m AOD.

<u>Subjective:</u> The viewpoint depicts a small to medium-scale, landscape that is enclosed due to the abundance of vegetation along the Laughton Highland Drain and the strong presence of the woodland to the west at Pyewipe Hall Farm and Laughton Common. Shelters belts, tree clumps and field trees are also visible in the foreground of the view and the edge of Laughton is also lined with strong woodland cover. In terms of variety, the combination of features includes abundant hedgerows, distinctive woodland blocks, shelterbelts, tree groups, field trees and the rising spur at the edge of Blyton. In terms of texture, this is a very attractive landscape with a distinctive mix of colour due to the benefit of tree cover and varied topography and pastoral land uses.

<u>Overall:</u> This is a very attractive and enclosed landscape that supports numerous hedgerows with strong tree cover all which gives a very pleasant appearance to the view. The deciduous woodland blocks and woodland at Laughton Common are also very prominent and attractive features in this landscape. This is a highly interesting view that is enclosed and intimate with a complex mixture of attractive features including the prominent vegetation cover around Laughton and Blyton.

#### Receptors

This viewpoint is representative of views available to walkers using the footpath (Blyt/32/1). There are no meaningful views towards the Site/Sites due to distance, intervening settlement bordering Laughton Road and at Blyton Grange. There are intervening woodlands, shelterbelts and robust hedgerows that provide a further layer of screening and separation.

Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable



# **Viewpoint: LCC-C-V - Dring Lane**

#### **Viewpoint Baseline:**

The view is located at the junction of Dring Lane with A159 (Laughton Road), looking southeast towards the Cottam 3a Site/Sites with the Cottam 3b Site/Sites beyond.

<u>Objective:</u> This viewpoint offers views of a slightly undulating landscape within the context of a wider Wooded Vale that also shares a boundary with the Unwooded Vale. The interface between the two landscape types is quite conspicuous at this location. The land use is predominantly arable interspersed with very few woodland blocks and hedgerows. In terms of man-made features, the A159 (Laughton Road) is dominant along with the wooded setting of the Respect Green Burial Park at the eastern end of Dring Lane. In terms of man-made features, electricity pylons stand out on the horizon amidst the arable fields and intervening plantations.

<u>Subjective:</u> The viewpoint depicts a large-scale, landscape that is open and exposed due to the lack of hedgerows and intensive arable fields. The main area of woodland is located around the burial park, which serves to close down views towards the south. Further trees and tall hedgerow cover are also located to the north of Blyton Grange, which provide further closure to views southwards from Dring Lane. There is also a strong line of vegetation (including tall tree cover) to the east side of the A159 (Laughton Road) which provides further separation and screening in the landscape. In terms of variety, the combination of features includes occasional hedgerows and woodland at the burial site, otherwise the interest is focused towards Laughton Common to the west. In terms of texture, this is an almost bland landscape with very few distinctive features other than the woodland at the burial park and Laughton Woods.

<u>Overall:</u> This is a very open, simple landscape that supports intensive agriculture with a distinct lack of hedgerows. The deciduous woodland blocks and woodland at Laughton Common are the neatest attractive features which add balance and a sense of familiarity.

#### Receptors:

This viewpoint is representative of views available to users of Dring Lane approaching the burial ground and road users along the A159. There are no meaningful views towards the Site/Sites due to distance, intervening woodland bordering the burial park and Blyton Grange and the strong tree belt to the east side of the A159. There are intervening hedgerows to the east of the A159 with some tree cover that provide a further layer of screening and separation.

Scope Out

Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable



# Viewpoint: LCC-C-W - Northorpe Road

#### **Viewpoint Baseline:**

The view is located on Northorpe Road where it then leads into Monson Road to the north of the settlement of Northorpe. The view is looking southwest towards the Cottam 3a Site/Sites with the Cottam 3b Site/Sites beyond.

<u>Objective:</u> This viewpoint offers views over a plateau landscape within the context of a wider Wooded Vale. The land use is predominantly arable interspersed with very few woodland blocks and some hedgerows. In terms of man-made features, Northorpe Road is dominant where it passes across the landscape at this higher elevation (approximately 20m AOD) than the surrounding vale of Northorpe Beck.

<u>Subjective:</u> The viewpoint depicts a large-scale, landscape that is open and exposed due to the lack of hedgerows and intensive arable fields. The main area of woodland and tree cover is located around the settlement of Northorpe and mainly associated with Northorpe Hall and parkland known as The Park. Further tree cover is associated with Northorpe Beck, otherwise the landscape is largely devoid of tree cover. In terms of variety, the combination of features is limited to occasional hedgerows, small woodland blocks and tree cover within Northorpe, otherwise the interest is focused towards Laughton Common to the west. In terms of texture, this is an almost bland landscape with very few distinctive features other than the woodland at the hedgerows between the large-scale field systems.

Overall: This is a very open, simple landscape that supports intensive agriculture with a distinct lack of hedgerows and tree cover. The deciduous woodland blocks and woodland at Laughton Common are the nearest attractive features which add balance and a sense of familiarity towards the west.

# **Receptors:**

This viewpoint is representative of views available to users of Northorpe Road which then leads into Monson Road when approaching the settlement of Northorpe. There are no meaningful views towards the Site/Sites due to distance, intervening topography and built form.

Scope Out

Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not applicable	Not applicable
Not applicable.	Not applicable.	Not applicable.	Not Applicable



# **Viewpoint: LCC-C-X – Scotton Nature Reserve**

#### **Viewpoint Baseline:**

The view is located at Scotton Common Nature Reserve, looking south towards the northern extent of the Cottam 3a Site/Sites.

<u>Objective:</u> This viewpoint offers views over an almost flat landscape within the wider context of the Wooded Vales of Laughton Forest that is fully conspicuous at this location. The land use partly arable interspersed with plantation woodland including Dallison Plantation that stands tall at the southwest corner of the view (right of view). This plantation mirrors the other coniferous woodland blocks in the area and others located at the southeast corner of the view (right of view) for example. In terms of man-made elements, there are very few detractors with plantation woodland being a consistent feature, however the electricity pylons in the far distance add discordancy to an otherwise harmonious landscape.

<u>Subjective:</u> The viewpoint depicts a combination of scales, comprising a small scale and intimate feel within the enclosed woodland areas and a larger scale where the views extend to distant horizons across the arable landscape. The enclosed landscape is dominated by large scale woodland blocks that frame views, often to distant horizons as far as Scotton and Northorpe. In terms of variety, the views depict the stark contrast between the open arable fields (often without hedgerows) that are enclosed with extensive areas of dense woodland.

<u>Overall:</u> The arable landscape is a plain feature but the contrasts with the woodlands and shelterbelts add interest and vibrancy to the views. The enclosed nature of the woodlands also provides a balanced and calm environment with a strong sense of isolation and solitude. The landscape of Laughton Woods is a rare and unusual feature within this part of Lincolnshire and a focus for both formal and informal recreation. The overall experience is very pleasant and invigorating.

# **Receptors:**

This viewpoint is representative of views available to visitors to Scotton Common Nature Reserve and Laughton Forest. The view is also experienced by motorists and residents travelling between Laughton and Scotton along Laughton Road. There are no meaningful views towards the Site/Sites due to distance, topography and intervening hedgerows.

Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable



# Viewpoint VP2 - Scmp/195/2

# **Viewpoint Baseline:**

The view is located on the PRoW, footpath (Scmp/195/2), looking northwest in the wider context of the southern and eastern boundaries of the Cottam 1 Site/Sites.

<u>Objective:</u> This viewpoint offers views over a low-lying, flat landscape within the wider context of a broad valley, which is only just conspicuous in the view, but adds to the sense of scale. The land use is mainly arable with occasional geometric blocks of deciduous woodland, some that are clearly visible on the horizon. In terms of man-made elements, there is some influence of industrial/urban features, including the line of electricity pylons that are just visible in the distance looking north (right of view) as a detractor on the horizon and there are distant views toward the Trent and its associated power industry. The busy Roman road (Till Bridge Lane) is also a detractor with some noise and moving traffic, which influences the nature of the public right of way (PRoW). Isolated trees are evident within the field boundary hedgerows, in particular along the boundary with Till Bridge Lane to the south-west (left of view) and within the hedgerows to the east (right of view).

<u>Subjective:</u> The viewpoint depicts a large scale/vast landscape, being exposed with few areas of enclosure, and with far-reaching views. In terms of variety, the combination of landscape features presents a simple and well-balanced composition, but the presence of the pylons and busy road add some discordancy. In terms of texture, this is a well-managed arable land use with a muted colour combination giving the impression of an ordinary landscape this is almost bland, but balanced.

Overall: The view is influenced by the presence of the busy Till Bridge Road, which has an unnerving influence. This location offers no intimacy or feeling of comfort due to its lack of enclosure and the unpleasant proximity to the busy road network.

#### Receptors

This viewpoint is representative of views available to PRoW users along the footpath Scmp/195/2. This is a section of the footpath that leads from the Roman road at Till Bridge Lane in the south towards the settlement of Scampton in the northeast. There are no meaningful views towards the Site/Sites due to distance, topography and intervening layering of hedgerows.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable



# Viewpoint VP3 - Scmp/31/1

# **Viewpoint Baseline:**

The view is located on the PRoW, bridleway (Scmp/31/1), looking north in the wider context of the southern boundaries of the Cottam 1 Site/Sites.

Objective: This viewpoint offers views over a low-lying, flat landscape within the wider context of a broad valley, which is only just conspicuous in the view, but adds to the sense of scale. The land cover is mainly arable with occasional geometric blocks of deciduous woodland, some that are clearly visible on the horizon. In terms of man-made elements, the A1500 (Till Bridge Road) is evident to the north-west (left of view). The busy A1500 is a detractor due to the frequent, fast-moving traffic owning to its long straight alignment. In terms of other built features, Tillbridge Farm and its associated agricultural buildings are located to the southwest (left of view). The farmhouse holds listed building status (assessment of any effects of the listed building are assessed within the Heritage Statement) and the viewpoint also offers direct views (following the direction of the bridleway) towards the small settlement of Thorpe Le Fallows in the distance, which also supports listed buildings. Tall hedgerows screen the majority of the views towards the north-west (left of view) and Brattleby Gorse is just visible on the far horizon.

<u>Subjective:</u> The viewpoint depicts a landscape scale that is large with an open view mainly towards the north. In terms of variety, landscape features present a combination of openness and enclosure due to the presence of some tall hedgerows. In particular, the tall hedgerows on the western boundary of the bridleway enclose this view, bringing some intimacy to the location. In terms of texture, the landscape appears quite ruffled in character, but also robust especially where the thick vegetation lines the course of the River Till. The colours in this view are muted giving an ordinary appearance that is almost bland, but with some interest.

<u>Overall:</u> The view is influenced by the presence of the busy Till Bridge Road, which has an unnerving influence. This location offers some intimacy and feeling of comfort due to the enclosure provided by the tall hedgerow that adjoins the bridleway to the west.

# **Receptors:**

This viewpoint is representative of views available to horse riders using the bridleway Scmp/31/1 and for motorists using Till Bridge Road. The viewpoint is also representative of views for the group of isolated, residential properties associated with Tillbridge Farm. This is a section of the bridleway that leads from Till Bridge Lane towards the settlement of Thorpe le Fallows and Thorpe Lane in the north. There are no meaningful views towards the Site/Sites due to distance, topography, the intervening layering hedgerows and the settlement of Thorpe le Fallows. The backdrop of strong woodland also helps to dimmish the presence of any distant features.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable



# Viewpoint VP9 - Fleets Road, Stur/79/1

#### **Viewpoint Baseline:**

The view is located on Fleets Road at the junction with PRoW, footpath (Stur/79/1), looking northeast towards the southwest boundary of the Cottam 1 Site/Sites.

Objective: This viewpoint offers views over a low-lying, flat landscape but the wider context of a broad valley is not evident due to the tall hedgerows which border Fleets Road, and which diminish the sense of scale at this location. The land cover is mainly built up with residential buildings with Fleets Road having a dominant influence in the foreground of the view. The strong hedgerow cover to both sides of Fleets Lane however provide cover for the residential buildings, which belies their presence at this location. The hedgerow sitting south of Fleets Lane (right of view) has some gaps and the entrance provides views into the Sturton by Stow Recreation Field. There is a further hedgerow within the recreation field that closes the views further to the south.

<u>Subjective:</u> The viewpoint depicts a small/intimate landscape with the hedgerows enclosing the location giving a tight view. In terms of variety, the landscape features are simple but there is discordancy due to the entrance into the recreation field and the open views of the car park. In terms of texture, the landscape features are managed, but colourful giving an interesting appearance that is typical to an edge of settlement setting.

<u>Overall:</u> The view is typical to local character and with the residential development being within the context of the view this adds a sense of security, safety and familiarity at this location. This is a relatively calm edge of the settlement; the dominance of Fleets Road is however distracting in what otherwise is a pleasant view. The hedgerows and tree cover provide a strong feature.

#### Receptors:

This viewpoint is representative of views available to walkers using footpath Stur/79/1, motorists using Fleets Road, and residents on the eastern edge of Sturton by Stow.

This is a similar view to that provided by Viewpoint VP08, although at closer proximity to Site/Sites.

Scope Out.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not applicable	Not applicable	Not applicable	
Not applicable	Not applicable	Not applicable	



# Viewpoint VP24 - B1398

# **Viewpoint Baseline:**

The view is located along the B1398, looking west towards the southern extent of the Cottam 1 Site/Sites.

<u>Objective</u>: This viewpoint offers views from the foot of the scarp slope over a low-lying, flat landscape; however, the wider context of a broad valley is not evident due to the closed nature of the view. The lack of visibility away from the edge of the settlement is due to the intervening hedgerow and shelterbelt that is tall and dense. The viewpoint shows a typical village setting where the B1398 stands out as the prominent feature in the context of the adjoining hedgerows and tree cover. The southern built edge of Cammeringham is also visible to the north (right of view), but the houses are largely hidden behind the tree cover. Grass verges separate the hedgerows from the road and are a distinctive feature of this section of the road. The shelter belt comprises sycamore, oak and field maple.

<u>Subjective:</u> The viewpoint depicts a small-scale, closed view at the edge of the settlement located towards the foot of the scarp slope. In terms of texture, the vegetation is mainly native and muted in colour and the roadside hedgerow is well-managed.

Overall: The view is interesting, pleasant and typical in character to the string of settlements that follow the scarp slope where the presence of a parkland landscape adds to the sense of history. The overall experience of this view is interesting and pleasant with an overriding sense of consistency.

# **Receptors:**

This viewpoint is representative of views available to walkers, motorists and residents travelling between the settlements of Cammeringham and Brattleby along the B1398.

There are no meaningful views due to distance, topography and intervening hedgerows and woodland at Brattleby Gorse, Cammeringham Low Covert and Beck Spinney.

Scope Out



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not applicable



# **Viewpoint VP25 - Stow Lane and Lincoln Road Crossroads**

# **Viewpoint Baseline:**

The view is located along the B1398 at the junction with Stow Lane and Lincoln Road, looking southwest towards the southern extent of the Cottam 1 Site/Sites.

<u>Objective:</u> This viewpoint offers views of a very gently rolling landscape at the foot of the scarp slope, where the wider context of the broad lower-lying valley is hardly visible due to the intervening landform and tree cover. The land use is predominantly arable, however the combination of the road intersection and adjoining residential areas impart a strong urban influence. The viewpoint is located to the south of the small settlement of Ingham where the built form is clearly evident within the view. Other man-made influences include telephone masts, lighting columns and signage that add to the complex nature of the road junction.

<u>Subjective:</u> The viewpoint depicts a medium scale, open, quite discordant view at the edge of the settlement where the hedgerows and tree cover provide some enclosure and intimacy along the road in parts. Woodlands located around Brattleby Hall and the settlement of Brattleby are also visible on the far horizon to the south (left of view) and include both deciduous and coniferous species. The nature of view is a busy location due to the road junction, the proximity to the edge of the Ingham settlement and colourful mixture of traffic signs and road markings.

Overall: The view is typical in character to the string of settlements that follow the scarp slope where the experience is pleasant, but bland in parts where the open arable landscape is a dominant feature, and the edge of settlements are exposed in the landscape.

# **Receptors:**

This viewpoint is representative of views available to walkers, motorists and residents travelling between the settlements of Ingham and Cammeringham along the B1398.

There are no meaningful views due to distance, topography and intervening hedgerows and woodland cover.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable



# Viewpoint VP26 - Ingh/24/2

#### **Viewpoint Baseline:**

The view is located on PRoW, bridleway (Ingh/24/2), looking northwest towards Cottam 1 North Site/Sites and southwest towards the Cottam 1 South Site/Sites.

<u>Objective:</u> This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying, gently undulating landscape within the wider context of a rolling lowland at the foot of the limestone capped scarp slope. The land use is predominantly arable farmland with many of the large fields under single crop. There is plantation woodland interspersed with deciduous woodland that form distinctive groups and help channel views across the area. There are geometric blocks of woodland to the south associated with Manor Farm and Cammeringham Grange between the settlements of Ingham and Brattleby, including Half Acre Plantation and Cammeringham Top Covert. To the north, there are geometric woodland blocks at Hare's Wood and Fillingham Castle. Hedgerows enclose the fields and provide additional layering to the landscape which is crossed by farm tracks that are also prominent in the context of the adjoining hedgerows. There is also pasture within the small fields to the west (left of view) of the bridleway. Tree clumps are also common in this landscape and they are particularly evident dotted in hedgerows just to the west of the view, bordering the fields in use as pasture and sheep grazing. In terms of man-made features, the mobile home park is discordant with the character and distinctiveness of the settlement of Ingham.

<u>Subjective:</u> The viewpoint depicts a medium to small-scale landscape that is partially enclosed at this location due to the areas of woodland cover, giving an intimate feel to the view. New Plantation and Larch Plantation closes down some views across to the west and the small watercourse (tributary of the River Till) to the north of Long Lane also supports a strong line of tree cover. The view provides a combination of features that includes strong hedgerows, shelterbelts, tree clumps and plantation woodland, which add a simple but attractive composition.

<u>Overall:</u> The view is typical in character to the wider rolling arable landscape, which is interesting and pleasant where hedgerows and woodland add interest and lend an enclosed nature to views across the area. In terms of variety, there are a number of elements that create an interesting composition and there are also strong contrasts between open arable fields and enclosed woodlands in parts. The good combination of features adds colour, texture and harmony to views. Overall, the view is balanced and the landscape is well-managed with strong colours that give an overall impression of an attractive and pleasant landscape.

#### Receptors

This viewpoint is representative of views available to walkers, residents, and horse riders on the PRoW (Ingh/24/2) that extends from the northern edge of Ingham settlement into the wider landscape.

There are no meaningful views due to distance, topography and intervening hedgerows and woodland cover.

Scope Out



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable



# Viewpoint VP27 - Junction of Church Hill and the B1398

# Viewpoint Baseline:

The view is located along the B1398 at the junction with Church Hill and PRoW Camm/29/1, looking west towards the northern extent of the Cottam 1 Site/Sites.

<u>Objective:</u> This viewpoint offers views of an almost flat landscape at the top of the scarp slope, where the wider context of the broad lower-lying valley is only just visible due to the intervening landform. The road junction is a dominant feature within the foreground of the view. The land use is predominantly arable interspersed with geometric blocks of deciduous woodland that stand out clearly on the horizon as dark, strong features. The viewpoint is located to the east of the small settlement of Cammeringham where the built form, tree clumps and hedgerows close down any visibility towards the east.

<u>Subjective:</u> The viewpoint depicts a large-scale landscape that is vast and exposed giving an invigorating view with the Trent power industry just visible on the far horizon. The nature of the foreground view is a busy location as the two roads converge and this detracts from the distant features, which are more interesting. The view provides a combination of features in the wider landscape including plantations, shelterbelts, tree clumps, isolated trees and hedgerows.

<u>Overall:</u> The view is typical in character to the string of settlements on the ridgeline where the open expanses between these settlements provide far reaching and invigorating views that are often panoramic. The overall experience in this viewpoint is invigorating and very pleasant apart from the proximity to the road that evokes a sense of discordancy.

#### Receptors

This viewpoint is representative of views available to walkers, motorists and residents travelling between the settlements of Ingham and Fillingham along the B1398.

There are no meaningful views due to distance, topography and intervening settlement, hedgerows and woodland cover.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable



# Viewpoint VP28 - Junction of Ingh/17/1 and Ingh/17/2 and Ingh/18/1 and Ingh/18/2

#### Viewpoint Baseline

The view is located along junction of PRoW, footpaths Ingh/17/1 and Ingh/17/2 and footpaths Ingh/18/1, looking west towards the northern extent of the Cottam 1 Site/Sites.

<u>Objective:</u> This viewpoint offers views of an almost flat landscape within the wider context of a rolling lowland at the foot of the limestone capped scarp slope. The land use is predominantly arable interspersed with deciduous woodland that stands out on the horizon as distinctive features. Hedgerows enclose the fields and provide an additional layering to the landscape which is crossed by farm tracks that are also prominent in the context of the adjoining hedgerows.

<u>Subjective:</u> The viewpoint depicts a large-scale landscape that is open in contrast to the areas of woodland cover. Fox Covert and Hares Wood close down some views across the area. The view provides a combination of features that are well-balanced and well-managed with muted colours that give an overall impression of a calm landscape.

Overall: The view is typical in character to the wider rolling arable landscape, which is interesting and pleasant where hedgerows and woodland add interest and depict an enclosed nature. There are also strong contrasts in parts where wider open views are possible that provide a greater sense of scale and less intimacy.

#### Receptors:

This viewpoint is representative of views available to walkers travelling between the settlements of Ingham and Fillingham on a well-connected footpath network.

There are no meaningful views due to distance, topography and intervening hedgerows.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable



# Viewpoint VP31 - Fill/87/1 just off Willingham Road

#### **Viewpoint Baseline:**

The view is located at the junction of PRoW footpath (Fill/87/1) with Willingham Road, looking west towards the northern extent of the Cottam 1 Site/Sites.

Objective: This viewpoint offers views of an almost flat, low-lying landscape within the wider context of a rolling lowland at the foot of the limestone capped scarp slope. There are extended views towards the east where Hares Wood and Fox Covert stand out as strong features on the horizon. The land use is predominantly arable interspersed with a strong hedgerow network and tree clumps that stand out on the skyline and across field boundaries. The land is also crossed by farm tracks with adjacent hedgerows including the footpath which follows one of these tracks and stands prominent in the landscape especially where it joins with Willingham Road. There are few man-made influences apart from moving traffic on the horizon where Middle Street passes north to south between the City of Lincoln and the Hull crossing.

<u>Subjective:</u> The viewpoint depicts a medium-scale landscape that is mostly open apart from the blocks of deciduous woodland on the horizon that follow the line of the scarp slope and give some enclosure. The view provides a combination of features including clumps of oak trees sitting in hedgerows, typically to the west (left of view) that are a strong feature adding to the sense of enclosure. The hedgerows to the west have frequent gaps in places but this barely evident in the context of the wider view. Rising landform is also prominent to the north-east of the viewpoint around Church Farm and this combined with tree cover adds a pleasant character to the view in this direction.

<u>Overall:</u> The view is typical in character to the wider rolling arable landscape, which is interesting and pleasant where the woodland blocks and isolated oak trees add stimulus. There is also a strong sense of consistency, and the landscape is unspoilt with very few man-made interventions. There are also extended views south along the ridgeline towards Ingham Cliff which adds vigour to the view.

#### Receptors

This viewpoint is representative of views available to walkers along the footpath (Fill/8/1) and motorists travelling on Willingham Road between the settlements of Fillingham and Ingham.

No meaningful views due to distance, topography and intervening hedgerows.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not applicable



# **Viewpoint VP40 - Junction of Fillingham Lane and Stone Pit Lane**

# **Viewpoint Baseline:**

The view is located at the junction of Fillingham Lane and Stone Pit Lane, looking southeast towards the northern extent of the Cottam 1 North Site/Sites.

Objective: This viewpoint offers views of an almost flat landscape within the wider context of a rolling lowland. Fillingham Lane is a prominent feature as it is a major route that connects Fillingham with Willingham By Stow. The land use is predominantly arable with some tree and woodland cover at the edge of the settlement. There are clear and uninterrupted views to the northeast (left of view) towards Heaton's Wood, Top Wood, Big Wood, and Oak Wood. Views to the south are limited due to the hedgerows to the south of Fillingham Lane. Normanby Gorse is also visible in the horizon to the south. Isolated trees are notable in the foreground of the view and to the south of Fillingham Lane with a few running along Stone Pit Lane.

<u>Subjective:</u> There are wide grass verges that separate the road from the hedgerows. The scale of the view is small, enclosed and intimate and this is a simple landscape. The enclosed nature of the road is appealing that provides for a balanced and calm environment. In terms of texture, the vegetation is managed and muted in colour. The proximity to the road and settlements at Willingham (right of view) provide some sense of security.

*Overall:* The experience is interesting and pleasant.

#### Receptors

This viewpoint is representative of views available to motorists and residents at the eastern edge of the settlement of Willingham by Stow.

There is a similar view provided by Viewpoint VP39.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable



# Viewpoint VP42 - Gltw/88/1

#### **Viewpoint Baseline:**

The view is located on the PRoW, bridleway (Gltw/88/1), looking west towards the northern extent of the Cottam 1 Site/Sites.

Objective: This viewpoint offers views of a very gently rolling landscape within the context of a broad valley that is almost conspicuous at this location. The land use is predominantly arable with mixed woodland visible to the north (left of view) comprising Nursery Plantation, and to the south woodland cover on the far horizon at Fillingham Grange and The Lake, and Fillingham is a strong dark feature. The views towards the far horizon are curtailed by the landform in the foreground. Tree clumps are also a feature along the hedgerow boundaries, which enhance the existing woodlands and give the impression of a more intimate landscape. In terms of man-made elements, there is little built influence since the landscape is sparsely populated with only a few isolated dwellings and grange houses.

<u>Subjective:</u> The viewpoint depicts a medium to large-scale, partially open landscape, with views closed down by a wooded horizon. The intensive arable land use opens visibility, but the landform and strong hedgerows with tree clumps help to dissipate the scale. In terms of variety, the combination of features includes woodland, tree clumps and hedgerows that present a simple landscape with very limited interest.

In terms of texture, this is a highly managed arable land use with a muted colour combination and very few far-reaching views.

<u>Overall:</u> The bridleway is partially concealed as it travels along the west side (left of view) of existing hedgerow where the large, open arable fields are the main feature of the view. The intervening woodland and settlement at Fillingham also close down views towards the south. The immediate view is typical of the local landscape character, but the far-reaching open views offer more interest. The overall experience is pleasant but with some bland foreground features.

#### Receptors:

This viewpoint is representative of views available to PRoW users along bridleway Gltw/88/1. This section of bridleway is used by walkers and leads from Kexby Road at Glentworth in the north to join High Street at Willingham in the south. There are no meaningful views towards the Site/Sites due to distance, topography and intervening layering of hedgerows and woodlands.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable



# Viewpoint VP43 - Owmb/5/2 just off A15

# **Viewpoint Baseline:**

The view is located on the PRoW, footpath Owmb/5/2 at the junction with the A15 (Ermine Street), looking west towards the northern extent of the Cottam 1 Site/Sites.

<u>Objective:</u> This viewpoint offers views of a very gently rolling landscape but the context of the broad valley to the west is not fully conspicuous at this location due the foreground topography. The land use is predominantly arable with mixed woodland visible such as Pale Wood, Fox Covert and Lady's wood, and to the south woodland cover on the horizon at Ingham is a strong dark feature. In terms of man-made elements, the A15 is a prominent feature as it leads north towards Hemswell Cliff and south towards Lincoln.

<u>Subjective:</u> The viewpoint depicts a large-scale, open landscape which is punctuated by well managed hedgerows with frequent gaps that provide short but frequent views across the open fields. In terms of variety, the combination of features includes strong gappy hedgerows and large woodland blocks that present a varied and balanced composition with very few detractors other than the influence of the busy A15 and fast-moving traffic that erodes the character. In terms of texture, this is a well-managed landscape with contrasting colours that are muted but interesting, giving the impression of a pleasant landscape with some intimacy created by the woodland blocks.

Overall: The busy A15 is a significant detractor due to the fast-moving traffic. The presence of strong hedgerows closes down visibility and decreases the sense of scale. The overall experience is unsettling due to the proximity of the A15, but the landscape context is visibly pleasant.

# **Receptors:**

This viewpoint is representative of views available to PRoW users along footpath Owmb/5/2. This section of footpath is used by walkers and leads from the A15 in the west to join Owmby Cliff Road in the east. The view is also experienced by motorists and residents using the A15 and access to Owmby Cliff Farm and Owmby Cliff Farm Cottages. There are no meaningful views towards the Site/Sites due to distance, topography and intervening hedgerows and woodlands.



Receptor susceptibility to change     Value of view     Sensitivity     Embedded Mitigation       Not Applicable     Not Applicable     Not Applicable				
Not Applicable  Not Applicable  Not Applicable  Not Applicable  Not Applicable	Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	Not Applicable	Not Applicable	Not Applicable	Niet Applicable



# Viewpoint VP47 - Junction of Mill Mere Road and Pilham Lane

#### Viewpoint Baseline:

The view is located at the junction of Mill Mere Road and Pilham Lane looking east towards the Cottam 2 Site/Sites and north towards the Cottam 3b Site/Sites.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a slightly undulating, low-lying landscape within the wider context of a broad vale, which is hardly conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop. There are some local variations in landform where the land rises to the west (left of view) towards Wharton Wood and the A159. To the north, the landform follows a narrow spur towards the settlement of Pilham and to the south the landform is gently undulating to take account of the localized hills that rise to approximately 20m AOD. The landform is generally at a similar elevation towards the east but the settlement of Corringham closes down views across the landscape. In terms of enclosure, there are very few woodland blocks or shelterbelts in the wider landscape other than Yawthorpe Fox Covert to the east and Wharton Wood towards the west. At closer proximity, there is vegetation at the edge of the Corringham within the field systems to the west of Middle Street. The field systems are smaller scale at this location and the strong tree cover in the hedgerows helps to close down views across the landscape towards the eat. To the north, east and south, there are mainly open views and to the east, the settlement of Corringham (and associated vegetation) closes down the visibility. In terms of man-made features, there is the settlement of Corringham and other settlement is centered on Aisby to the north and Gainsborough to the southwest. Pilham Lane is a prominent feature particularly its long, straight alignment where it heads north towards Pilham. The wind turbine at Blyton Park Driving Centre is also just visible on the far horizon to the northeast (left of view). The Grade I listed tower of the Church of St. Lawrence is also just visible in the view.

<u>Subjective:</u> The viewpoint depicts the immediate edge of settlement in the wider context of a large-scale, exposed landscape. In terms of variety, the hedgerows are a strong feature, but well cut back with few hedgerow trees, and the poplar shelterbelts also stand out. The hedgerows are present on both sides of Mill Mere Road and Pilham Lane and there are narrow grass verges that presents a simple consistency. In terms of texture and colour, the hedgerows are low cut and have a highly managed appearance and little texture, and the view is muted. Mast poles are however prominent. The view tends to be ordinary overall, but the extended visibility in most directions (north south and west) reveals a more open character, interest and stimulus to this location.

<u>Overall:</u> The view is influenced by the presence of the busy Pilham Lane, which is a detractor to the rural character of the view. The tree cover is limited, the hedgerows are cut back and the arable land use is intensively managed. The overall experience is that of an ordinary location due to the lack of features and distant visibility.

#### **Receptors:**

This viewpoint is representative of views available to walkers, horse riders, motorists and residents using Mill Mere Road and Pilham Lane. There are no meaningful views due to distance, topography and intervening hedgerows and woodland cover.



		r	
Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable



# Viewpoint VP51 - wltn/13/1

# **Viewpoint Baseline:**

The view is located on the PRoW, footpath (Wltn/13/1), looking southwest towards the northern extent of the Cottam 2 Site.

<u>Objective:</u> This viewpoint offers views of a gently rolling landscape at the settlement edge of Willhoughton where the broader valley context is hardly conspicuous due to the abundance of tree cover, woodlands and the scattering of built form at this location. The land use is predominantly pasture with sheep grazing with an abundance of field trees and tree groups within the hedgerows. In terms of man-made elements this location adjoins the settlement of Willhoughton but the built form is barely visible due to the abundance of tree cover.

<u>Subjective:</u> The viewpoint depicts a small-scale, intimate landscape, being enclosed with limited views beyond the immediate field boundaries. In terms of variety, the combination of features includes pasture, hedgerows, woodland, tree clumps, hedgerow trees, field trees and pasture that enhances the character and provides a very pleasant and interesting view. In terms of texture, the landscape is grazed with sheep stock and the colours are evocative of a pastoral landscape being rich in tone and varied.

<u>Overall:</u> The pasture is a strong feature, and the gently undulating landform adds a soft quality to the view. The immediate view is very interesting and typical to the local landscape character with historic influences with being an Ancient Monument (List Entry 1007689) Site of medieval preceptory and settlement remains, Temple Garth, with the remains of a medieval landscape that has survived largely intact. The overall experience is pleasant and very interesting with a highly attractive combination of features.

# Receptors:

This viewpoint is representative of views available PRoW users along the footpath and visitors to the Ancient Monument. This section of footpath leads from the Ancient Monument to join with Southfield Lane that then connects to Hemswell in the south. There are no meaningful views towards the Site/Sites due to distance, topography and intervening hedgerows and tree cover.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable



# Viewpoint VP52 - Pilham Lane

# **Viewpoint Baseline:**

The view is located on Pilham Lane, looking southeast towards the northern extent of the Cottam 2 Site/Sites.

This viewpoint offers views of an undulating landscape within the context of rolling lowland that is conspicuous at this location. The land use is predominantly arable with some pasture and areas of deciduous woodland. In terms of man-made elements, there is settlement comprising isolated dwellings and the small hamlets of Gilby and Aisby, which are former medieval sites. Other influences include telegraph poles that break the horizon to the south of Green Lane and Gilby Farm is dominant on the horizon due to the associated large-scale agricultural buildings.

The viewpoint depicts a large-scale landscape, being exposed but accented by strong woodland blocks that dominate the horizon, including woodland at Corringham Scroggs. In terms of variety, the combination of features includes farmsteads, low hedgerows, small woodland blocks, shelterbelts, field trees and tree groups, but the man-made detractors denude the landscape character. In terms of texture, this is a highly managed landscape with low clipped hedgerows and muted colours and there are no invigorating qualities than the wide views.

Overall, the arable landscape adds to the sense of denudation and this contrasts sharply with well-tendered pasture that lies to the east side of Pilham Lane, and in the context of the medieval settlements at Gilby and Aisby. On balance the landscape is intact and harmonious as a sum of parts.

# **Receptors:**

This viewpoint is representative of views available to users of Pilham Lane that includes walkers, horse riders, motorists and residents. The leads from Pilham in the north to the A631 in the south. There are no meaningful views towards the Site/Sites due to the intervening settlement of Aisby and Gilby, distance and intervening hedgerows and woodland cover.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable



# Viewpoint VP53 - Corr/22/1

# **Viewpoint Baseline:**

The view is located on the PRoW, footpath (Corr/22/1) at the junction with Bonsall Lane, looking southeast towards the northern extent of the Cottam 2 Site. The view is also looking north towards the southern extent of the Cottam 3b Site/Sites.

<u>Objective:</u> The viewpoint offers views over an almost flat landscape within the wider context of a rolling broad valley that is hardly conspicuous at this location. The land use is predominantly arable with occasional blocks of deciduous woodland. In terms of man-made elements, there are direct views of farm buildings and isolated residential properties giving the location a settled appearance. Masts and poles also litter the landscape, but the roads are inconspicuous in the distance and only evident at close range.

<u>Subjective:</u> The viewpoint depicts a large-scale, open landscape, being exposed due to the large field sizes and a limited hedgerow network. In terms of variety, the combination of features includes farmsteads, residential properties, low cut hedgerows, deciduous woodland blocks and hedgerow trees.

<u>Overall:</u> The footpath is a feature as it heads south from Aisby, but the wider outlook is disrupted by hedgerows and woodland blocks in places. Where there are distant views towards the skyline, they are often punctured by telegraph poles which appear dominant and consistent on the horizon. There is limited tree cover around Aisby and therefore the residential properties stand out in the landscape. The overall experience is a calm and intact landscape but the presence of poles and other man-made features exert an ordinary influence over the other more attractive features.

#### Receptors:

This viewpoint is representative of views available to PRoW users along footpath Corr/22/1. This section of footpath is used by walkers and leads from Bonsall Lane in the north to the settlement of Corringham in the south. The view is also experienced by motorists and residents travelling between Corringham and Aisby. There are no meaningful views due to distance, topography and intervening hedgerows.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable



# **Viewpoint VP64 - A159 (Laughton Road)**

## Viewpoint Baseline:

The view is located on the A159 (Laughton Road), looking southeast towards the western extent of the Cottam 3a Site/Sites.

Objective: This viewpoint offers views over an almost flat landscape within the wider context of the Wooded Vales of Laughton Forest that is fully conspicuous at this location. The land use is partly arable interspersed with plantation woodland including Dallison Plantation that stands tall at the southwest corner of the view (right of view). This plantation mirrors the other coniferous woodland blocks in the area and others located at the southeast corner of the view (right of view) in the context with Dallison Plantation, Park House Farm and Mount Pleasant Farm. In terms of man-made elements, there are very few detractors with plantation woodland being a consistent feature, however the electricity pylons in the far distance add discordancy to an otherwise harmonious landscape. The settlements of Laughton and Blyton are located beyond the plateau and not evident in the view.

<u>Subjective:</u> The viewpoint depicts a combination of scales, comprising a small scale and intimate feel adjacent to the woodland areas and a larger scale where the views extend to distant horizons across the arable landscape. The enclosed landscape is dominated by large scale woodland blocks that frame views, often to distant horizons as far as Scotton and Northorpe. In terms of variety, the views depict the stark contrast between the open arable fields (often without hedgerows) that are enclosed with extensive areas of dense woodland. Laughton Road is a prominent feature but the clumps of trees and roadside vegetation help the road to blend with the landscape. Woodland at the Respect Green Burial Park is also prominent on the horizon.

<u>Overall:</u> The arable landscape is a plain feature but the contrasts with the woodlands and shelterbelts add interest and vibrancy to the views. The enclosed nature of the woodlands also provides a balanced and calm environment with a strong sense of isolation and solitude. The landscape of Laughton Woods is a rare and unusual feature within this part of Lincolnshire and a focus for both formal and informal recreation. Detractors such as wind turbines and pylons are evident in the far distance adding complexity to the view, but the overall experience is very pleasant and invigorating.

#### Receptors

This viewpoint is representative of views available to the users of the A159 (Laughton Road) and visitors to Scotton Common Nature Reserve and Laughton Forest. The view is also experienced by motorists and residents travelling between Laughton and Scotton along Laughton Road. There are no meaningful views towards the Site/Sites due to distance, topography and intervening hedgerows.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not Applicable	Not Applicable	Not Applicable	Not Applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable



### **Viewpoint VP65 - Scotton Common Nature Reserve**

#### Viewpoint Baseline:

The view is located at the entrance to the Scotton Common Nature Reserve at the junction with Laughton Road, looking south towards the northern extent of the Cottam 3a Site/Sites.

<u>Objective:</u> This viewpoint offers views over an almost flat landscape within the wider context of the Wooded Vales of Laughton Forest that is fully conspicuous at this location. The land use partly arable interspersed with plantation woodland including Dallison Plantation that stands tall at the southwest corner of the view (right of view) for example. In terms of man-made elements, there are very few detractors with plantation woodland being a consistent feature, however the electricity pylons in the far distance add discordancy to an otherwise harmonious landscape.

<u>Subjective:</u> The viewpoint depicts a combination of scales, comprising a small scale and intimate feel within the enclosed woodland areas and a larger scale where the views extend to distant horizons across the arable landscape. The enclosed landscape is dominated by large scale woodland blocks that frame views, often to distant horizons as far as Scotton and Northorpe. In terms of variety, the views depict the stark contrast between the open arable fields (often without hedgerows) that are enclosed with extensive areas of dense woodland.

Overall: The arable landscape is a plain feature but the contrasts with the woodlands and shelterbelts add interest and vibrancy to the views. The enclosed nature of the woodlands also provides a balanced and calm environment with a strong sense of isolation and solitude. The landscape of Laughton Woods is a rare and unusual feature within this part of Lincolnshire and a focus for both formal and informal recreation. The overall experience is very pleasant and invigorating.

#### **Receptors:**

This viewpoint is representative of views available to visitors to Scotton Common Nature Reserve and Laughton Forest. The view is also experienced by motorists and residents travelling between Laughton and Scotton along Laughton Road. There are no meaningful views towards the Site/Sites due to distance, topography and intervening hedgerows.

Scope out.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable



#### **Viewpoint: LCC-C-D - Blackthorn Lane**

#### **Receptor Baseline:**

This viewpoint is located on Blackthorn Lane and looks directly southwest over the Cottam 1 South Site and northwest over the Cottam 1 North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising a low-lying, flat landscape where the wider context of a broad valley is not that evident due to the enclosed nature of the view. The land use is mainly productive arable with many large fields under single crop as a series of geometric fields bordered by hedgerows and ditches. There are some local variations in landform where the land rises to the east towards the settlement of Ingham to approximately 60m AOD. To the west and south, the landform is predominantly flat at approximately 10m AOD and the land rises to the north to form part of Blackthorn Hill. In terms of enclosure, there are some woodland blocks to the south comprising of Cammeringham Low Covert, Long Covert, Brattleby Gorse, Horse Covert and Polar Wood that close down views in this direction. There is some open visibility towards the east and the scarp slope with the woodland at Cammeringham Top Covert and Cammeringham Grange. In terms of man-made features, there is an isolated agricultural building at Blackthorn Hill and farmsteads at Cold Harbour to the southwest and Furze Hill and Lower Furze Hill to the west. Little else exists in terms of built influence other than the Trent power industry on the far horizon to the west.

<u>Subjective:</u> The viewpoint depicts a medium to large-scale, partially enclosed landscape with arable fields divided by land drains and strong, well-managed hedgerows. In terms of variety, there is a combination of features such as hedgerows and woodland, and Thorpe Lane is also just evident on the far horizon by virtue of the tree cover adding some complexity and interest to the view. In terms of texture, the landscape is simple with well-managed hedgerows and muted colours. Although there is a distinct lack of tree cover in the hedgerows, the deciduous woodlands on the horizon add a wooded context to the view.

<u>Overall:</u> The view is influenced by the flat landscape with regular and geometric fields in arable use divided by tall hedgerows. The woodland at Brattleby Hall is just visible in the distance to the south (right of view) and the tree cover associated with Stow Lane is also just visible on the horizon to the north. There is also a tall, distinctive hedgerow to north of Blackthorn Lane that closes down views towards the north, but in contrast the hedgerow to the south of Blackthorn Lane lacks structure and is gappy in parts giving more visibility in this direction. The overall experience is a simple landscape with very few elements or features of interest. This is an isolated location, but pleasant with a sense of safety and security.

#### Recentors

This viewpoint is representative of views available to motorists, residents, walkers, and horse riders using these local lanes at the western edge of Cammeringham.

#### **Description of View:**

The foreground of the view comprises the immediate context of agricultural fields with tall hedgerows. Further agricultural fields are not visible beyond this since the landscape is flat, and this local collection of fields are expansive and vast where the intervening hedgerows close down visibility. The middle and long distance therefore yields no visibility. To the right-hand side of the view, there are further agricultural fields and to the left-hand side of the view there is a similar collection of fields. The remainder of the horizon is made up of hedgerows that are well established, and so middle and distant views are not possible. There are no vertical elements in the view.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
In terms of forces for change for LCC-C-D, poor	Scenic: There are locations where panoramas are	Range of Features: The location	Embedded Mitigation would be taken into account at the construction, operation (Year
hedgerow condition is commonplace across the area	framed by larger areas of woodland or woodland is		1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation
with hedgerows often excessively trimmed and gappy	present on the horizon. Some panoramas include	comprises the local network of tracks at the edge of a settlement. This is an	is also referred to as primary mitigation and would include the following measures:
and that few surviving trees are in poor condition. There	undulating landform, which accentuates the presence	enclosed location due to the hedgerows	is also referred to as primary mitigation and would include the following measures.
has also been a steady decline in permanent pasture	of the woodland. This feature is typical along the	that are outgrown in parts, which helps	Panels to be set a minimum of 15m from adjacent PRoW.
and conversion to arable uses around the edges of	Blackthorn Lane but only visible through occasional	to provide some intimacy. In terms of	Patiets to be set a minimum of 15m from adjacent Prow.
settlements. Agricultural intensification and farm	gaps in the hedgerow.	variety, there is a combination of	Panels to be set a minimum of 50m from adjacent residential property boundaries.
amalgamation is leading to a more homogenous	gaps in the neugerow.	features such as hedgerows and	Trailers to be set a minimum of 30m from adjacent residential property boundaries.
landscape. Where woodlands survive, such as	<u>Cultural:</u> The landscape has small villages, hamlets and	woodland, and Thorpe Lane is also just	Panels to be set minimum of 20m from major watercourses and minimum of 8m from
Cammeringham Low Covert and Long Covert, they are	farms that are evenly distributed across the area. This	evident on the far horizon by virtue of	minor watercourses.
important features in the views across the area and	includes the settlement of Cammeringham and	the tree cover adding some complexity	Third vacci courses.
providing relief within the agricultural setting.	Ingham and their outlying farmsteads including	and interest to the view.	Panels to be set a minimum of 3m from Site boundaries.
providing rener within the agricultural setting.	Blackthorn Hill.	and meerest to the view.	Tanels to be set a minimum of similar site boundaries.
<b>Overall</b> , the susceptibility for LCC-C-D is conditioned by	Blacktiotii iiii.	<u>Importance of View:</u> This is a part open	Existing hedges are to be allowed to grow out and will be managed to a height of 5m.
the need to conserve rural settlement pattern and	Natural: Many of these woodlands form geometric	location on the network of local tracks.	Hedgerow trees will be encouraged to grow out to add further thickening and growth
ensure that new development is complimentary to	shapes such as Cammeringham Low Covert, Long	The overall experience is a simple	to the field boundaries with the addition of new hedgerow trees as appropriate,
intrinsic local character. Hedgerow quality is the key	Covert and Brattleby Gorse, which form a strong group	landscape with very few elements or	randomly spaced along the length of existing hedges.
aspect of the existing character, where they are often	of woodlands to the west of the settlement of	features of interest. This is an isolated	
tightly trimmed, gappy and species-poor. However,	Cammeringham.	location, but pleasant with a sense of	Lighting will be limited to downlights within substations and battery banks only and
there are significant opportunities to restore and	Carrineringnam.	safety and security, which raises the level	used when maintenance or security is required. Lighting will be PIR operated and will
manage hedgerows, where they have been lost and	Recreation and Enjoyment: The Unwooded Vales	of importance of the view.	be calibrated to vehicle and personnel movements. All visible lighting would be 50W,
enhance tree cover. The relevant characteristics of the	Character Area 4a is valued for recreation which often	·	installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting
landscape therefore have some ability to accommodate	focuses on the local lane network with views towards	Number of Receptors: This is likely to only	required within panelled areas will be manually operated. There will be no lighting on
change without undue adverse effects given there is	the woodland blocks.	attracts local users. Overall, this is a quiet	perimeter fencing.
scope to restore the hedgerows and their associated	the woodiand blocks.	backwater that is not a public right of	
habitats and landscape features that have been lost	<u>Local Distinctiveness and Sense of Place:</u> The landscape	way, which deflects from the importance	The visual effects <b>with only</b> the Embedded Mitigation taken into account equate to
through agricultural intensification. The relevant	has a 'strong sense of place' endorsed by the strong	of the view.	those effects set out for the operation stage (Year 1) and this includes secondary
characteristics of the landscape therefore have a	agricultural character. Wide areas retain a sense of		mitigation which will have been carried out, but will have had limited physical or visual
medium susceptibility to change without undue adverse	rural tranquility and intactness away from the main		impact at this Embedded Mitigation stage.
effects.	road network. These areas can only often be reached		
	by local lanes such as Blackthorn Lane.		
	Health and Wellbeing: There is a limited network of		
	PRoW meaning that the local lanes can be the main		
	focus for recreation and well-being.		
	Important Spatial Function: Many village place names		
	provide some evidence of 'time depth' with several		
	woodlands being named after a local village such as		
	Cammeringham Low Covert, indicating it once		
	belonged to the community of Cammeringham.		
	Overall, the value of Viewpoint LCC-C-D is shaped by		
	the distinctive character of the woodlands which are		
	local landmarks. The landscape possesses areas of		
	deciduous and native woodland that is forms a group		
	to the west of the Settlement of Cammeringham.		
	Wide areas retain a sense of rural tranquility and		
	intactness away from the main road network. These		
	areas can only often be reached by local lanes such as		
	Blackthorn Lane.		
Mark and	Mark and	BA - J	Aller A co Poul II
Medium	Medium	Medium	Not Applicable



## **Viewpoint: LCC-C-D - Blackthorn Lane**

Construction

## Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened by the foreground hedgerows bordering Blackthorn Lane. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows to the foreground and within the surrounding field systems would give

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

some partial layering, these activities

of the view.

would still occupy an extensive proportion

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate north, south and east of this location and the wider landscape to the east would also not fundamentally change.

#### **Construction Access**

There would be no views of the construction access from this viewpoint.

#### **Cable Route Corridor**

#### Operation (Year 1)

The foreground of the view would change from agricultural fields to an area of panels, but the tall hedgerows would provide some intermediary screening. Further agricultural fields are not visible beyond and so this element of the view would not change, and middle and distant views are not possible. There are no vertical elements in the view to give rise to any change.

Views of the wider Site of Cottam 1 South are predominantly screened by several blocks of existing woodland breaking up the overall scale of the Scheme.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

Views of the wider Site of Cottam 1 South are predominantly screened by several blocks of existing woodland breaking up the overall scale of the Scheme.

#### Scattered tree belt

A small section of scattered tree belt is proposed within field D31, partially breaking up this field and linking a lone field tree to the woodland to the south (Cameringham Low Covert).

#### Shelterbelts

Two shelterbelts are proposed within the Site joining Cameringham Low Covert, Brattleby Gorse and Thorpe wood and creating a continual visual screen when seen from the northern/southern aspects.

#### **Existing hedges**

To the northern and eastern boundaries of field D34 adjacent to this viewpoint, exiting hedges are to be enhanced, being allowed to grow out and managed to 5m with the addition of hedgerow trees at irregular intervals along the hedgeline to reinforce the field boundaries and provide interest and further screening of the Site from the east and north. The existing hedgerows to the south of fields D31, D32 and 34 are low cut and create an open and exposed landscape. These will be managed to a height of 5m with the addition of hedgerow trees to create a much more enclosed route along Blackthorn Lane and creating visual interest and screening from Stow Lane to the north. Enhancement of the northern boundary to fields D25 and D30 will mitigate views from the Stow Road to the north. Enhanced hedges around D27 and D28 will further break up the east/west views and strengthen the character locally.

#### New hedges

A new section of hedgerow is proposed on the northern boundary of field D30 where this section is missing. Field D27 will also have a new hedgerow with hedgerow trees planted along its northern boundary where this is currently missing. A new hedge is proposed to the east of field D31 which is currently open, joining up with the woodland to the south of the Site. This will screen views from the west and strengthen the field pattern locally with new hedgerow trees throughout creating a more settled and less exposed landscape in this area.

#### **Grassland mixes**

Adjacent to this viewpoint, the ditch on the southern boundary of field D34 is to have a 20m buffer of tall herb mix on its northern boundary creating visual interest, keeping the ditch open and providing biodiversity. A tussock mix is proposed around the field boundaries and where appropriate, a flower rich pollinator mix is to be provided to add to the visual interest and biodiversity.

#### Adverse effects:

- Panels and structures across the landscape
- Increased hard standing areas
- Increased traffic locally

# With secondary mitigation such as planting and grass seeding being taken into account at the

changes to the landscape would occur and the

operational stage (Year 15) the following

visual effects are set out below.

**Operation (Year 15)** 

The view will become more enclosed since the intervening vegetation will have established to screen the Site/Sites from close range views and will form a layered effect across the landscape to the south with the woodland backdrop. Shelterbelts will join existing woodland cover to create a strong east/west buffer both locally and from longer distance views. An existing backdrop of patches of woodland creates the mid distance skyline with several relatively large

blocks of woodland to the south of this view.

Overall, in terms of mitigation for the Cottam 1 South Site, due to the predominance of medium and large-scale agriculture, the aim is to promote the use of sustainable agricultural practices. The key aims for enhancement of the landscape include creating grass margins in arable fields and restoring hedgerows. Other measures include the provision of more habitats for pollinator and pest-regulating species. Opportunities for increasing the area and network of habitats such as flower rich field margins, hedgerows and species rich grasslands and seeking opportunities for the sustainable use of wetland habitats.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscapeImproved (more natural) management
- of exiting vegetation

  Less expanse of intensively managed
- arable land

  A less exposed and windswept
- landscapeWater quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning

activities, dust

runoff.

generation and site

**Decommissioning** 



	Viewpoint is outside of the 0.5km study area and there would be no view of this route.  Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	<ul> <li>Some minor light pollution within open countryside</li> <li>Substation, Battery storage and other associated infrastructure structures visible above existing vegetation</li> <li>The residual effects at the Operational Phase at Year 15 without Mitigation equate to those effects at the beginning of Year 1 before secondary mitigation has been applied. The Effects set out below include secondary mitigation which will have been carried out but will have had limited physical or visual impact at this stage.</li> </ul>	Growth of existing and proposed vegetation is assumed to be:  Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.
Magnitude	Medium	High	Medium	Very Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Moderate <b>Significant</b>	Moderate Significant	Moderate Significant	Negligible <b>Not</b> <b>Significant</b>



Vienne einete L	CC C D. Blackthown Laws	SOLAR PROJECT			
Viewpoint: Lo	Viewpoint: LCC-C-D – Blackthorn Lane				
	In-combination Effects [Cumulative Sites]	Cumulative Effects {Cumulative Developments}			
	There is no Intervisibility between the Cottam 1, 2 and 3a and 3b Sites and therefore no incombination effects between the Sites.  In terms of the combined effects of dust and noise and visual effects, there would be views of the construction works from this viewpoint, but no visibility of the construction access, the Cable Route Corridor and even though the viewpoint is within the 2km Study Area for the Cottam 1 Substation, there would be no intervisibility at this location.  There is potential for significant effects at the	In Summary  The Cumulative Effects upon viewpoint LCC-C-D of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination. Viewpoint LCC-C-D at Blackthorn Lane is located approximately 6.3km to the closest Gate Burton Solar site. Due to the distance and intervening vegetation such as Normanby Gorse the view is closed and therefore has no potential intervisibility.  Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area  Aesthetic Aspects of the Landscape  Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the			
	construction stage from the activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site.	majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.  There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]  Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]  Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]			
	The In-combination effects upon viewpoint LCC-C-D of the substation and Cumulative Sites is considered to be Moderate at construction, reducing to no change during the operation and decommissioning stages of the Scheme. This is due to the limited impact upon the view	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.			
	as a result of the segregated nature of the Sites. Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.	Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.			
Magnitude	Construction Stage: Medium	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low			
Type of Effect	Construction Stage: Adverse and Short Term	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term			
Significance of Effect	Construction Stage: Moderate <b>Significant</b>	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant			



#### Viewpoint: LCC-C-G - ProW Fill/85/2

#### **Receptor Baseline:**

This viewpoint is located on PRoW, bridleway (Fill/85/2) at the junction with Willingham Road, looking in all directions over the Cottam 1 North Site and southwest towards the Cottam 1 South Site beyond.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising a slightly undulating, low-lying landscape within the wider context of a broad vale, which conspicuous at this location. The land use is mainly productive arable farmland with many fields under single crop. There are some local variations in landform where the land rises towards the east with Fillingham Grange at approximately 25m AOD. To the west, the landform is flat at approximately 15m AOD and to the south the land rises gently to a series of inconspicuous hills at approximately 25m AOD. The landform to the north is slightly undulating rising to a high point at Glentworth Grange on Kexby Road at approximately 27m AOD. In terms of man-made features, there are isolated farmsteads at North Farm and Side Farm in the southwest and Fillingham Grange and Glebe Farm to the east. Farm buildings for Greystones Farm can be seen in the middle ground of view sitting in close to the south of Willingham Road (right of view). Otherwise, there is little else in the way of built influence apart from the distant views towards the Trent power industry in the west.

Subjective: The viewpoint depicts a medium-scale, open landscape with deciduous geometric woodlands such as Larch Plantation and New Plantation visible to the southwest. In terms of variety, there are strong hedgerows on either side of Willingham Road that present some consistency and overall interest to the view. There is strong hedgerow to the east of the bridleway that closes down visibility towards the east and the arable fields to the west are divided by sparse hedgerows with some tree clumps. Willingham Road has a pleasant character and being almost single track, there is a remote and tranquil quality to this stretch of road. Willingham Road is also distinguished by the grass verges to each side that adds a greater feeling of scale and open character. In terms of texture and colour, the landscape is well-managed and there are a range of elements that add visual interest but overall, the landscape is muted. The deciduous woodlands such as Larch Plantation add some texture to the view and overall structure to the landscape and views towards the wooded skyline at Fillingham Castle are also evident within the Scarps and Dipslopes Character Area 6a.

<u>Overall:</u> The view is influenced by the part enclosed nature of the location with strong hedgerows that lack tree cover where the woodland blocks are prominent features in the landscape. The overall experience is pleasant as this is a quiet location with a distinct absence of settlement and disturbance.

#### **Receptors:**

This viewpoint is representative of views available to walkers using the bridleway (Fill/85/2). This section of bridleway leads from Willingham Road (at Greystones Farm) then in a 'dog-leg' alignment to eventually join with Kexby Road at Glentworth Grange.

#### **Description of View:**

The foreground of the view comprises Willingham Road in the immediate context of large scale and expansive agricultural fields with a limited network of hedgerows but with views towards Larch Plantation. Further agricultural fields are visible beyond this since the landscape is gently undulating, and this local collection of fields are expansive and vast where the intervening hedgerows are absent allowing extended visibility. The middle and long distance therefore yields good visibility. To the right-hand side of the view, there is further large-scale agricultural fields and to the left-hand side of the view there is a similar collection of fields. The remainder of the horizon is made up of farmsteads at Turpin Farm, Side Farm and North Farm, large scale agricultural fields with few hedgerows and so middle and distant views are filtered. There are vertical elements in the view that include agricultural buildings and associated agricultural infrastructure.





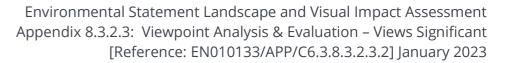
High

#### Receptor susceptibility to change Value of view Sensitivity **Embedded Mitigation** In terms of forces for change for LCC-C-G, there are Scenic: The PRoW network such as bridleway (Fill/85/2), Range of Features: The location Embedded Mitigation would be taken into account at the construction, operation (Year aims to protect existing rural landscape features, in appeals to the visual senses due to absence of comprises the local road network that 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation particular the restoration of hedgerows. The most settlement and the remote and tranquil character. connects two settlements. This is a part is also referred to as primary mitigation and would include the following measures: widespread change has been in agricultural enclosed location due to the hedgerows intensification from pastoral to arable cropping that has that are outgrown with some tall trees, Panels to be set a minimum of 15m from adjacent PRoW. **Cultural:** The landscape shows evidence of generally resulted in the loss of hedges, and consequently, which helps to provide some intimacy. In little settlement, with only the isolated farmsteads at increase in field size. The loss of pasture is particularly Panels to be set a minimum of 50m from adjacent residential property boundaries. terms of variety, there are strong Glebe Farm and Greystones Farm. The prevalent use evident around settlements, where grazing animals and hedgerows on either side of Willingham brick in these farmsteads adds visual unity to the Panels to be set minimum of 20m from major watercourses and minimum of 8m from smaller field sizes contribute to the setting and structure Road that present some consistency and landscape. of several villages. overall interest to the view. There is minor watercourses. strong hedgerow to the east of the Natural: There are extensive expanses of agricultural **Overall,** the susceptibility for LCC-C-G is conditioned by bridleway that closes down visibility Panels to be set a minimum of 3m from Site boundaries. landscape, which are carefully managed, resulting in managing growth, ensuring development is appropriate towards the east and the arable fields to very few areas of semi natural habitat. Large-scale in terms of type, scale and location. The flat, open the west are divided by sparse Existing hedges are to be allowed to grow out and will be managed to a height of 5m. agricultural buildings are a key feature, and some are landscape is also a key consideration and whilst the aim hedgerows with some tree clumps. Hedgerow trees will be encouraged to grow out to add further thickening and growth shrouded in tree cover such as the buildings at Glebe to the field boundaries with the addition of new hedgerow trees as appropriate, is to plant new tree planting around key settlements, Farm. Where present, this woodland gives added woodland does not form a significant component of this *Importance of View:* The view is randomly spaced along the length of existing hedges. significance to views along the east west roads such as influenced by the part enclosed nature of landscape, and in considering its open and expansive Willingham Road. character, extensive new woodland planting would be the location with strong hedgerows that Lighting will be limited to downlights within substations and battery banks only and generally inappropriate. However, there is significant lack tree cover where the woodland used when maintenance or security is required. Lighting will be PIR operated and will Recreation and Enjoyment: The bridleway network has a benefit with appropriate tree planting that could be blocks are prominent features in the be calibrated to vehicle and personnel movements. All visible lighting would be 50W, local identity, but connections are limited and often used in and around settlements to increase the landscape. The overall experience is installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting severed by the road network in most places. This occurrence of semi-natural habitats and maintain the pleasant as this is a quiet local lane with required within panelled areas will be manually operated. There will be no lighting on location at Willingham Road is a constraint to the a distinct absence of settlement and perception of a 'well-treed' landscape. The relevant perimeter fencing. north south bridleway network at this location. disturbance, which raises the level of characteristics of the landscape therefore have a high susceptibility to change without undue adverse effects importance of the view. The visual effects with only the Embedded Mitigation taken into account equate to Local Distinctiveness and Sense of Place: The landscape those effects set out for the operation stage (Year 1) and this includes secondary has a limited 'sense of place' due to its productive and Number of Receptors: This is likely to mitigation which will have been carried out but will have had limited physical or visual utilitarian character, however the working farmsteads attracts local users and those from the impact at this Embedded Mitigation stage. along the east west road network add the local wider area who may be travelling distinctiveness to views. between settlements. Health and Wellbeing: The Unwooded Vales Character Area 4a provides limited areas for recreation due to the distinct lack of PRoW, but this is diverted onto the east west lane network where gaps exist such as this location. Important Spatial Function: The landscape benefits from the high level of visual unity from the extensive arable land use and sparse settlement along east west routes. **Overall,** the value of Viewpoint LCC\_C\_G is shaped by its a geometric modern landscape of planned enclosure and modern field systems. There is some time depth associated with the presence of the isolated farmsteads, and the remote tranquil character is a feature of the view, otherwise the landscape presents a simple palette of land uses and features.

Medium to High

Not Applicable

Medium





#### Viewpoint: LCC-C-G - PRoW Fill/85/2

#### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened by the foreground hedgerows bordering Willingham Road. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows to the foreground and within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate north, east and west of this location and the wider landscape to the northwest would also not fundamentally change.

#### **Construction Access**

All throughout the construction stage the viewpoint will be affected due to Willingham Road having 3 points of access into the Cottam 1 North Site. The first point of access is close to Glebe Farm as it leads to field B2. The second point of access is close to North Farm as it leads to fields A2 and A4. The third point

#### Operation (Year 1)

The foreground of the view comprising Willingham Road would not change but the immediate context of agricultural fields would change to areas of new panels. There is a limited network of hedgerows and so views towards Larch Plantation would remain but set above the panels. Further agricultural fields beyond would be screened by the new panels. The remainder of the horizon is made up of farmsteads at Turpin Farm, Side Farm and North Farm and their associated woodlands, but the middle and distant views are already filtered by layering of hedgerows and trees giving rise to no change in views towards these features.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A large belt of scattered trees is proposed to run around the northern boundary of field C28 and the eastern boundary of field C23 adjacent to the existing waterway creating a strong buffer of mixed riparian species along its length. This will screen views from the east into the Site and will act as a buffer to views from the village of Ingham 1km to the southeast. Further short sections of tree belt are to link lone field trees to the boundary vegetation further west.

#### **Shelterbelt**

A 5m wide shelterbelt is proposed to the southern boundary of field C21 to help mitigate views south of the main part of the Site from the Willingham Road and to strengthen the field boundaries locally. Further shelterbelts are proposed in fields C15 and C18 breaking up the views across to the west and enhancing the watercourse in these fields.

#### Existing hedges

Existing hedges along the Willingham Road will be enhanced as necessary, with the eastern boundary to field C19 being augmented with hedgerow trees and allowed to grow out to 5m. Across the Site running broadly north south, the existing low hedges will be enhanced, allowed to grow out and be managed at a height of 5m and will be augmented with the addition of hedgerow trees to strengthen the field pattern and further mitigate views across the Site.

#### New hedges

Where field boundaries are missing or gappy within the Site; again, running broadly north/south, these will be infilled with new hedgerows to strengthen the field patter and local character. New hedges are also proposed to the eastern and western boundaries of fields C27 and C30 with the ditch line between the two being reinforced where existing specimen trees exist. This will mitigate views from the east and reinforce the historical field pattern.

#### Successional Scrub

Around Larch Plantation within the Site, successional scrub is proposed in order to create a buffer around the woodland and to provide both visual and ecological benefit with the woodland edge being layered towards the meadow mixes beyond.

#### **Grassland mixes**

A tall herb mix is proposed around existing watercourses, with a general width of 5-10m depending upon the size of each ditch and its current surroundings.

Tussock mixes are proposed to most field boundaries to create a natural edge to existing and proposed hedgerows with a flower rich pollinator mix used where appropriate on south/west facing field boundaries and around existing services.

# With secondary mitigation such as planting and grass

**Operation (Year 15)** 

seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

The view will become more enclosed since the proposed new hedgerows will have established to

The view will become more enclosed since the proposed new hedgerows will have established to create a strong field structure and partially screen views of the Scheme. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the close-range, the hedgerows will screen Site/Sites with mid and longer distance views appearing as a layered well-treed landscape with a backdrop of strong woodland features to some views with more distant horizons of hedgerow trees.

Overall, in terms of mitigation for the Cottam 1 North Site, the aim is to enhance the woodland and hedgerow network through the planting of small woodlands, tree belts, hedgerow trees and new hedgerows to benefit landscape character. Creating grass margins in arable fields is a key priority, including increasing the amount of flower rich areas, hedgerows and species rich grasslands. Planting new hedgerows to restore historic field patterns and create habitat linkages is also appropriate to counteract the threat to the landscape character and biodiversity.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

**Decommissioning** 

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain longterm improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical



Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.2.3: Viewpoint Analysis & Evaluation – Views Significant [Reference: EN010133/APP/C6.3.8.3.2.3.2] January 2023

	of access is close to Turpin's Bungalows as it provides access to fields C3 and C4.  Cable Route Corridor Viewpoint is outside of 0.5km study area.  Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.
Magnitude	Medium	High	Medium	Medium
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Moderate <b>Significant</b>



Viewpoint: Lo	iewpoint: LCC-C-G – ProW Fill/85/2			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance, the foreground hedgerow, the framing tree cover to each side of the viewpoint within the hedgerow. Therefore, there no in	In Summary  The Cumulative Effects upon viewpoint LCC-C-G of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination. Viewpoint LCC-C-G is located approximately 1.45km away from the closest Tillbridge Solar site, however, due to distance and vegetation surrounding small drains and tributaries no potential intervisibility is anticipated.  Fabric of the Landscape		
	combination visual effects are anticipated.	There would not be the removal of or changes in individual elements or features of the landscape within the character area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Adverse & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



#### Viewpoint: LCC-C-H - ProW Fill/767/1

#### **Receptor Baseline:**

This view is located along the route of PRoW, bridleway (Fill/767/1), looking in all directions and directly over the Cottam 1 North Sites beyond. The view is also looking north towards the Cottam 2 Site.

Objective: This viewpoint offers views of an almost flat, low-lying landscape within the wider context of a rolling lowland that extends well beyond the foot of the limestone capped scarp slope. There are extended views where the boundary vegetation of the Site/Sites is evident in the context of the open fields. The landform at this location falls to a low point and this helps in shielding the field in views from Willingham Road to the south. The footpath follows a 'dog-leg' alignment to reflect the field boundary and is shielded by the hedgerows that have grown tall and although gappy in parts it helps to provide enclosure and intimacy. The Larch Plantation that sits on the southern side of Willingham Road to the east of Side Farm is also clearly visible on the horizon where the landform is at a higher elevation than the bridleway. The large-scale agricultural buildings associated with North Farm are also visible to the west (left of view) along with the large woodland block where the land rises and extends to meet the woodland. The track is also a prominent feature in the landscape as it leads from the bridleway to serve North Farm.

<u>Subjective:</u> The viewpoint depicts a medium-scale landscape where the undulations in topography display a strong landscape pattern with the layering of hedgerows being a prominent feature. The landscape features are balanced with simple additions of farm buildings interspersed with tree cover. The landscape is managed and muted in colour, but overall, the view is not distinctive or 'out of the ordinary'.

Overall: The view is typical in character to the wider open and arable land use where the tall and outgrown hedgerows add some intimacy along the route of the bridleway. There is a sense of security and a safe quality to the landscape. Overall, the experience is bland but pleasant.

#### Receptors:

This viewpoint is representative of views available to walkers and horse riders along the bridleway (Fill/767/1) that leads from Glentworth Grange and Kexby Road in the north to meet with Willingham Road in the south

A similar view provided by Viewpoints VP35 and LCC-C-G.

#### **Description of View:**

The foreground of the view comprises Willingham Road in the immediate context of large scale and expansive agricultural fields with a limited network of hedgerows but with views towards Larch Plantation. Further agricultural fields are visible beyond this since the landscape is gently undulating, and this local collection of fields are expansive and vast where the intervening hedgerows are absent allowing extended visibility. The middle and long distance therefore yields good visibility. To the right-hand side of the view, there is further collection of large-scale agricultural fields and to the left-hand side of the view there is a similar collection of fields. The remainder of the horizon is made up of farmsteads at Turpin Farm, Side Farm and North Farm, large-scale agricultural fields with few hedgerows and so middle and distant views are filtered. There are vertical elements in the view that include agricultural buildings and associated agricultural infrastructure.



SOLAR PROJECT			
Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
In terms of forces for change for LCC-C-H, significant infrastructure development pressures exist from the main settlements and the minor roads that traverse the area. The challenges are to conserve the tranquility of the area through careful planning that minimises road construction, car use and disturbance, and provide sustainable transport options and well-designed green infrastructure.  Overall, the susceptibility for LCC-C-H is conditioned by the sensitivity of the rural roads and minor tracks, lanes and farm roads that are bordered by wide verges. Driving north to south across the area is relatively straightforward as the A156 runs true to the River Trent and the B1241 follows the almost meandering course of the River Till. Most of the developed settlements are near these roads, however narrow country lanes link east west and this direction of travel is slightly more challenging. The relevant characteristics of the landscape therefore have a high susceptibility to change without undue adverse effects given there is scope to protect the character and diversity of the road networks through conservation and enhancement of the local lanes and recognition of the value that the strategic routes provide in connections across the region.	Scenic: This region represents a major east-west link, connecting Lincolnshire with the North of England and the minor road network offers views over a local landscape that is, in parts, scenic with pleasant views. The network of PRoW such as this bridleway (Fill/767/1) are important.  Cultural: The close proximity to Gainsborough as a major historic crossing on the River Trent to the west and the strategic location of Roman roads on the limestone capped scarp slope to the east give rise to a number of historic settlements in the intervening landscape. This includes Fillingham and associated Fillingham Conservation Area and Fillingham Castle registered park and garden (List Entry:10009) to the east.  Natural: The local roads are valuable wildlife corridors since they are often narrow country lanes with grass verges, hedgerows to both sides and high levels of tranquility.  Recreation and Enjoyment: The 'east west' travel direction of local lanes often links the older settlements moving in a more random pattern following minor roads. These roads such as Willingham Road, Fillingham Lane and Kexby Road are popular for recreation as narrow country lanes.  Local Distinctiveness and Sense of Place: The landscape associated with Fillingham Lane and Willingham Road that derive their 'sense of place' from the woodland blocks that contrast with the intensive arable landscape.  Health and Wellbeing: Main roads are significant features in this landscape but the minor road networks and their connecting PRoW, including bridleways are often refuges of tranquility bringing benefits for health and wellbeing: The local roads play an important role in wayfinding by linking a number of historic and distinctive smaller string of settlements with the PRoW network.  Medium	Range of Features: The location comprises the local road network that connects two settlements. This is a part enclosed location due to the hedgerows that are outgrown with some tall trees, which helps to provide some intimacy. In terms of variety, there are strong hedgerows on either side of Willingham Road that present some consistency and overall interest to the view. There is strong hedgerow to the east of the bridleway that closes down visibility towards the east and the arable fields to the west are divided by sparse hedgerows with some tree clumps.  Importance of View: This is a part enclosed location on the network of local lanes. The landscape features are balanced with simple additions of farm buildings interspersed with tree cover. The landscape is managed and muted in colour, but overall, the view is not distinctive or 'out of the ordinary', which deflects from the level of importance.  Number of Receptors: This is likely to attracts local users and those from the wider area who may be travelling between settlements.	Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:  Panels to be set a minimum of 15m from adjacent PRoW.  Panels to be set a minimum of 50m from adjacent residential property boundaries.  Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.  Panels to be set a minimum of 3m from Site boundaries.  Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.  Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.  The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this Embedded Mitigation stage
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## Viewpoint: LCC-C-H - PRoW Fill/767/1

## Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened by the foreground hedgerows bordering Willingham Road. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows to the foreground and within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the east of this location.

#### **Construction Access**

There would be no view of any construction access from this viewpoint.

#### **Cable Route Corridor**

Viewpoint is outside of 0.5km study area and there would be no view of this route.

## Operation (Year 1)

The foreground of the view comprising Willingham Road would not change but the immediate context of agricultural fields would change to areas of new panels. There is a limited network of hedgerows and so views towards Larch Plantation would remain but set above the panels. Further agricultural fields beyond would be screened by the new panels. The remainder of the horizon is made up of farmsteads at Turpin Farm, Side Farm and North Farm and their associated woodlands, but the middle and distant views are already filtered by layering of hedgerows and trees giving rise to no change in views towards these features.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Shelterbelt planting

Strong blocks, incorporating lone field trees and a line of shelterbelt planting are proposed to the southern boundary of C18 adjacent to the existing watercourse where this is currently very open. The Site is in the immediate view at this point with low hedges along the roadside. A further block of planting is proposed to the northern corner of field C19 to further screen the Site from this location. A further line of shelterbelt planting is proposed running broadly east west from Larch Plantation to the east of the Site, breaking up the open field boundaries and linking to existing woodland. These belts will bring height and visual interest to an otherwise relatively open landscape where hedgerow trees are limited. A small block of planting is proposed to the entrance to Side Farm adjacent to the Willingham Road. A long line of shelterbelt planting is proposed to the southern boundaries of fields C7, 11, 13 and 16 adjacent to the existing watercourse providing a strong visual buffer along this route and reducing views towards the Cottam 1 South Site beyond.

#### New Hedgerows

A new hedge is proposed to the northwestern boundary of field C18 adjacent to the watercourse further mitigating views south into the wider Site and linking up with vegetation adjacent to Larch Plantation. A new hedgerow with hedgerow trees is to be planted to the eastern boundary of field C13 adjacent to the existing track. This will reduce views into this field from this viewpoint and help to strengthen the level of tree cover locally across the Site. New hedgerows are proposed to field boundaries across the Site to the south running broadly north/where these are missing. This will help reinforce historical field pattern which has been degraded and link existing vegetation and breaking up views.

#### Existing hedgerows

Existing hedgerows along the Willingham Road (fields C18 and C19) are to be allowed to grow out. They will be managed to a height of 5m and infilled with irregularly spaced native hedgerow trees to provide further height/screening and to reinforce the level of tree cover.

#### Successional scrub

A buffer of successional scrub will be planted around Larch Plantation helping to visually integrate the woodland into the surrounding landscape and enhancing the visual interest whilst creating a natural buffer to this woodland block and increasing its overall mass.

#### Grassland Mixes

Adjacent to this viewpoint, the ditch between fields C18 and C19 is to have a 10m buffer of tall herb mix on either side creating visual interest, keeping the ditch open and providing biodiversity. A tussock mix is proposed around the field boundaries and where appropriate, a flower rich pollinator mix is to be provided to add to the visual interest and biodiversity.

## **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

The view will become more enclosed since from the PRoW and Willingham Road looking south and southeast will be of a well treed landscape with vegetated links around Larch Plantation, breaking up the open skyline in this area. Close range views from this viewpoint and the PRoW will be of a shelterbelt within the existing field boundaries along the ditch line and enhanced hedgerows in the foreground. Shelterbelt and hedge planting will have established and will begin to provide strong vegetated layers across the landscape merging into existing woodland blocks with some woodland cover on the horizon where views permit. To the south east, across several fields in the mid-distance, enhanced blocks of scattered trees will soften views and will augment the level of tree cover locally, blending into the wooded horizon in places.

**Overall**, in terms of mitigation for the Cottam 1 North Site, due to the sensitivity of the rural lanes, the hedgerows should be protected and enhanced. The approach roads to the smaller settlements are a key feature that add to the identity of the local landscape and lines of trees are often characteristic in these locations. Tree planting should be confined to hedgerows (i.e., not on verges) on all historic enclosure roads).

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

## Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.



	Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	Wildflower meadow mix beneath paneled areas and a proposed margin verge habitat is to be provided adjacent to the Willingham Road.  Adverse effects: Panels and structures across the landscape Increased hard standing areas Increased traffic locally Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.
Magnitude	High	High	Medium	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Significance of Effect	Moderate-Majo <b>r Significant</b>	Major <b>Significant</b>	Moderate Significant	Minor Not Significant



viewpolite. Et	wpoint: LCC-C-H – ProW Fill/767/1			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance, the foreground hedgerow, the framing tree cover to each side of the viewpoint within the hedgerow. Therefore, there no in combination visual effects are anticipated.	In Summary The Cumulative Effects upon viewpoint LCC-C-H of the substation and Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Viewpoint LCC-C-H at PRoW Fill/767/1 is located approximately 1.5km to the closest Tillbridge Solar site. Due to the proximity and the lack of dense vegetation the scheme may be visible however visual effects would be limited.  Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.  There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge		
		Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]		
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2,d 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Adverse & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



## Viewpoint: LCC-C-I - Willingham Road

#### **Receptor Baseline:**

This viewpoint offers views along Willingham Road, looking in all directions directly over the Cottam 1 North Site and south towards the Cottam 1 South Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a slightly undulating, low-lying landscape within the wider context of a broad vale, which is conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop. There are some local variations in landform where the land rises to the west to a high point of approximately 20m AOD around Willingham by Stow and Kexby. To the north, the land rises to a local high point of approximately 15m AOD at Heaton's Wood and to the south there is a gentle fall towards the River Till, which takes a meandering course to the north of Normanby by Stow and to the east of Coates. Towards the east, the landform is generally flat at 10m AOD then rising gently towards the foot of the scarp slope from where the landscape then rises sharply towards the settlements of Fillingham and Ingham. In terms of enclosure, there are numerous woodland blocks that form strong geometric shapes in the landscape and collectively provide a dominant wooded horizon, particularly towards the north and south of the view. These woodlands include Fillingham Low Wood, New Plantation and Larch Plantation. To the west and north, the view is enclosed by the gently rising landform and settlements, whereas to the south the landscape is more open with views extending over the River Till Vale. Towards the east the geometric woodland blocks close down some visibility. In terms of man-made features, there are isolated farmsteads at Turpin Farm, Side Farm and North Farm and there are also residential properties at Moor Bridge, otherwise little else exists in terms of built influence. Occasional groups of conifer trees have a domestic character and the overhead wires that pass along the road network are also detractors. Willingham Road is prominent in the landscape and the 'S' curve in the road (where it becomes Fillingham Lane) offers an interesting view towards the east that captures the Limestone Scarps and Dipslopes Cha

<u>Subjective:</u> The viewpoint depicts a large-scale, partially open landscape. In terms of variety, the combination of landscape features includes farm buildings, plantation woodland, poplar shelterbelts, occasional hedgerow trees, hedgerows and arable fields that present a simple, well-balanced composition. In terms of texture and colour, this is an intensively managed land use that is mainly muted but the strong presence of geometric woodlands adds some interest and sense of enclosure. Grass verges are also a feature of these local lanes that add a 'sense of place' and distinctive character, and the hedgerows have a good range of native species including hawthorn, elder, ash and dog rose. The bends in the road also add intimacy to the landscape.

Overall: The view is influenced by the woodlands on the horizon towards the east that form a significant component and add balance to the landscape. This location offers some intimacy since this is a local lane with little traffic and there is no major settlement to disrupt the tranquility. The field hedgerows are cut back, and the arable land use is intensively managed, however, the mature ash trees within the hedgerows are a strong feature. The overall experience is pleasant, with some depth to views and strong contrasting features due to the presence of the plantation woodlands on the horizon and the slight undulations in topography. This is an isolated, remote location with a distinct absence of settlement, built form or other man-made features.

#### Receptors

This viewpoint is representative of views available to walkers and horse riders travelling between the settlements of Willingham by Stow in the west and Fillingham in the east.

#### **Description of View:**

The foreground of the view comprises Willingham Road in the immediate context of large scale and expansive agricultural fields with a limited network of hedgerows. Further agricultural fields are visible beyond this since the landscape is gently undulating, and this local collection of fields are expansive and vast where the intervening hedgerows are absent allowing extended visibility. The middle and long distance therefore yields good visibility. To the right-hand side of the view, there is further collection of large-scale agricultural fields and to the left-hand side of the view there is a similar collection of fields. The remainder of the horizon is made up of farmsteads at Turpin Farm, Side Farm and North Farm, large scale agricultural fields with few hedgerows and so middle and distant views are filtered. There are vertical elements in the view that include agricultural buildings and associated agricultural infrastructure.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
In terms of forces for change for LCC-C-I, significant	Scenic: There is a string of small, nucleated settlements	Range of Features: The location comprises the local	Embedded Mitigation would be taken into account at the construction,
infrastructure development pressures exist from the	on the limestone capped scarp slope that add to the	road network that connects two settlements. This is	operation (Year 1 and Year 15) and decommissioning stages of the
main settlements and the minor roads that traverse the	sequence of views, and the same sequence applies to	a part enclosed location due to the hedgerows that	Scheme. This Embedded Mitigation is also referred to as primary
area. The challenges are to conserve the tranquility of	the string of farmsteads on the east west minor road	are outgrown with some tall trees, which helps to	mitigation and would include the following measures:
the area through careful planning that minimises road	network.	provide some intimacy. In terms of variety, the	
construction, car use and disturbance, and provide		combination of landscape features includes farm	Embedded mitigation would be taken into account at this stage to include
sustainable transport options and well-designed green infrastructure.	<u>Cultural:</u> Where the farmhouses are set back from the	buildings, plantation woodland, poplar shelterbelts, occasional hedgerow trees, hedgerows and arable	the following measures:
illi asti ucture.	roads, lines of trees such as horse chestnuts form distinctive features and where the farmhouse directly	fields that present a simple, well-balanced	Danala to be get a minimum of 15 m from a diagont DDaW
<b>Overall,</b> the susceptibility for LCC-C-I is conditioned by	front the highway they are framed to each side with	composition.	Panels to be set a minimum of 15m from adjacent PRoW.
the sensitivity of the rural roads and minor tracks, lanes	oak and polar species which stand out in the	Composition	Panels to be set a minimum of 50m from adjacent residential property
and farm roads that are bordered by wide verges.	landscape. Conifer species are also seen with the	Importance of View: This is a part enclosed location	boundaries.
Driving north to south across the area is relatively	large-scale agricultural buildings. This characteristic is	on the network of local lanes. This location offers	
straightforward as the A156 runs true to the River Trent	particularly noticeable along Fillingham Lane and	some intimacy since this is a local lane with little	Panels to be set minimum of 20m from major watercourses and minimum
and the B1241 follows the almost meandering course of	Willingham Road.	traffic and there is no major settlement to disrupt	of 8m from minor watercourses.
the River Till. Most of the developed settlements are		the tranquility, which raises the importance of the	
near these roads, however narrow country lanes link	<u>Natural:</u> The quiet rural lanes provide opportunities for	view.	Panels to be set a minimum of 3m from Site boundaries.
east west and this direction of travel is slightly more	wildlife corridors across the area, especially where	Number of Decembers. This is likely to attracts local	
challenging. The relevant characteristics of the landscape therefore have a medium susceptibility to	they join with minor farm tracks and green lanes along	<u>Number of Receptors</u> : This is likely to attracts local users and those from the wider area who may be	Existing hedges are to be allowed to grow out and will be managed to a
change without undue adverse effects given there is	Willingham Road.	travelling between settlements.	height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of
scope to protect the character and diversity of the road	Described to the second Theorem and DD AW and	travelling between settlements.	new hedgerow trees as appropriate, randomly spaced along the length of
networks through conservation and enhancement of	<u>Recreation and Enjoyment:</u> There are no PRoW and recreation is provided by numerous small country		existing hedges.
the local lanes and recognition of the value that the	lanes. The slight turns and 'S' bends on the east west		existing neages.
strategic routes provide in connections across the	minor road network helps with the appreciation of		Lighting will be limited to downlights within substations and battery banks
region.	these views.		only and used when maintenance or security is required. Lighting will be
			PIR operated and will be calibrated to vehicle and personnel movements.
	Local Distinctiveness and Sense of Place: The 'sense of		All visible lighting would be 50W, installed at a maximum height of 4m with
	place' is marked by the minor bend in the road, which		cowls fitted to prevent light spillage. Lighting required within panelled
	is a distinctive feature of the east-west road network,		areas will be manually operated. There will be no lighting on perimeter
	which is typically straight.		fencing.
			The visual effects <b>with only</b> the Embedded Mitigation taken into account
	<u>Health and Wellbeing:</u> Willingham Road and Fillingham		equate to those effects set out for the operation stage (Year 1) and this
	Lane is a quiet backwater relative to the B1241 to the		includes secondary mitigation which will have been carried out, but will
	west and A15 to the east.		have had limited physical or visual impact at this Embedded Mitigation
	I was a street Constinuit Franchism. The language and triangle		stage.
	Important Spatial Function: The long eastward views to the limestone capped scarp slope are key to the		
	spatial qualities of the area.		
	spatial qualities of the area.		
	<b>Overall</b> , the value of LCC-C-I is shaped by the nature		
	of the predominantly rural and sparsely settled area		
	with dispersed farms. The east-west local network of		
	lanes contrast with the B1241 to the west and the A15		
	to the east and the 'S' bends in the road helps with the		
	appreciation of the views towards the scarp slope and		
	the associated woodlands at Fillingham Castle.		
Medium	Medium	Medium	Not Applicable





## Viewpoint: LCC-C-I - Willingham Road

#### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened by the foreground hedgerows bordering Willingham Road. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows to the foreground and within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would be a fundamental change to the north, south, east, and west of this location.

#### **Construction Access**

All throughout the construction stage the viewpoint will be affected due to Willingham Road having 3 points of access into the Cottam 1 North Site. The first point of access is close to Glebe Farm as it leads to field B2. The second point of access is close to North Farm as it leads to fields A2 and A4. The third point of access is close to Turpin's Bungalows as it provides access to fields C3 and C4.

#### Operation (Year 1)

The foreground of the view comprises Willingham Road would not change but the immediate context of agricultural fields would become areas of panels. Further agricultural fields beyond would also be screened by the new panels. The remainder of the horizon is made up of farmsteads at Turpin Farm, Side Farm and North Farm, large scale agricultural fields with few hedgerows but middle and distant views towards these features are filtered. There are vertical elements in the view that include agricultural buildings and associated agricultural infrastructure, but they would give rise to no cumulative change in this view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

Scattered tree belts are proposed around this viewpoint where existing lone trees are set within the fields. These belts will link these trees to the adjacent vegetation of the field boundaries, create added visual interest and provide limited screening across the Site in fields C4 and C3.

#### **Shelterbelt**

A strong 10m wide shelterbelt is proposed to the western boundary of Turpin's Farm to the south of the Willingham Road and joining the proposed scattered tree belt and existing woodland to the south of the farm. A further shelterbelt is proposed to the northern boundary of field C5 and the southern boundaries of fields C12, 15 and 18, breaking up views south and southeast. This belt lies adjacent to the existing watercourse which currently delineates the field boundaries but adds no vertical interest. Additional shelterbelt planting is proposed to the boundaries of the watercourse further south within fields C7, 11, 13 and 16 further reducing views across the Site/Sites and creating a multi layered landscape. To the north, a new 5m shelterbelt is proposed around Turpin's Bungalows set back 40m from these properties with a flower rich pollinator mix within this meadow area.

#### Existing hedges

Enhancement of existing low hedgerows is required along the Willingham Road. Existing hedges are to be allowed to grow out and managed to a height of 5m with the addition of hedgerow trees to provide added height and visual interest both along this route and within the local area and mitigate views into the Site both to the north and south.

#### New hedges

A new hedgerow is proposed to the northern and western boundary of field C7. A new hedge is required to the west and east of field C9 adjacent to Turpins Bungalows to mitigate views and to strengthen the historical field pattern.

#### Successional scrub

Successional scrub is proposed to the base of all existing woodland blocks to create a strong buffer to the woodlands and layered woodland edge.

#### **Grassland mixes**

Adjacent to the existing watercourses, a 10m buffer of tall herb mix on either side will create visual interest, keep the ditch open and provide added biodiversity.

A tussock mix is proposed around the field boundaries and where appropriate, a flower rich pollinator mix is to be provided to add to the visual interest and biodiversity. Wildflower meadow mix beneath paneled areas and a proposed margin verge habitat to the verges adjacent to the Willingham Road would provide enhancement.

Adverse effects:

## Operation (Year 15)

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

The view will become more enclosed since from the Willingham Road looking south and southeast will be of a well treed landscape with vegetated links around the existing local woodland, breaking up the open skyline in this area. Close range views from this viewpoint will be of a shelterbelt within the existing field boundaries and along the ditch line. Shelterbelt and hedge planting will have established and will begin to provide strong vegetated layers across the landscape merging into existing woodland blocks with some woodland cover on the horizon where views permit.

Reinforce hedgerow to the northern boundaries of fields C4 and C10, allow for the hedgerow to grow out.

Plant hedgerow trees to the boundaries of fields C3 and C9 to mitigate any views from the Road and Turpins Bungalows to the north of Willingham Road

The presence of the north south road network also severs habitat connectivity in some areas. The A156 is a major route that divides the Trent flood plain from the Till Vale to the east. The relevant characteristics of the landscape therefore have a limited ability to accommodate change without undue adverse effects given there is scope to protect and enhance the natural character of the minor 'east-west' local road network. There is also scope to improve linkages between the Trent flood plain and the Till Vale to the east by improving connectivity across major routes such as the A156 (Gainsborough Road).

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from

decommissioning

generation and site

activities, dust

runoff.

**Decommissioning** 





Magnitude Type of Effect	Medium  Adverse & Short Term	Medium  Adverse & Long Term	Low Adverse & Long Term	Very Low  Neutral & Short Term
	This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	above existing vegetation	7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.
	Cable Route Corridor Viewpoint is outside of 0.5km study area.  Substation	<ul> <li>Panels and structures across the landscape</li> <li>Increased hard standing areas</li> <li>Increased traffic locally</li> <li>Some minor light pollution within open countryside</li> <li>Substation, Battery storage and other associated infrastructure structures visible</li> </ul>	<ul> <li>Significantly improved biodiversity</li> <li>Growth of existing and proposed vegetation is assumed to be:</li> <li>Woodland/trees and shelterbelts: 2.5m max at Year 1,</li> </ul>	With secondary mitigation considered, the negative effects of the physical



Viewpoint: Lo	iewpoint: LCC-C-I - Willingham Road			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance, the foreground hedgerow, the framing tree cover to each side of the viewpoint within the hedgerow. Therefore, there no in	In Summary The Cumulative Effects upon viewpoint LCC-C-I of the substation and Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination. Viewpoint LCC-C-I is located approximately 1.2km away from the closest Tillbridge Solar Site however, due to distance and existing vegetation such as Fillingham Low Wood no intervisibility is anticipated.		
	combination visual effects are anticipated.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area. There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Adverse & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



## Viewpoint: LCC-C-J - Fillingham Lane

#### **Receptor Baseline:**

This viewpoint offers views along Fillingham Lane, looking east over the Cottam North 1 Site and south towards the Cottam 1 Site/Sites.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a slightly undulating, low-lying landscape within the wider context of a broad vale, which is conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop. There are some local variations in landform where the land rises to the west to a high point of approximately 20m AOD around Willingham by Stow and Kexby. To the north, the land rises to a local high point of approximately 15m AOD at Heaton's Wood and to the south there is a gentle fall towards the River Till, which takes a meandering course to the north of Normanby by Stow and to the east of Coates. Towards the east, the landform is generally flat at 10m AOD then rising gently towards the foot of the scarp slope from where the landscape then rises sharply towards the settlements of Fillingham and Ingham. In terms of enclosure, there are numerous woodland blocks that form strong geometric shapes in the landscape and collectively provide a dominant wooded horizon, particularly towards the east of the view. These woodlands include Fillingham Low Wood, New Plantation and Larch Plantation. To the west and north, the view is enclosed by the gently rising landform and the settlements, whereas to the south the landscape is more open with views extending over the River Till Vale. Towards the east the geometric woodland blocks close down some visibility. In terms of man-made features, there are isolated farmsteads at Turpin Farm, Side Farm and North Farm and there are also residential properties at Moor Bridge, otherwise little else exists in terms of built influence. Occasional groups of conifer trees have a domestic character and the overhead wires that pass along the road network are also detractors. Willingham Road is prominent in the landscape and the 'S' curve in the road (where it becomes Fillingham Lane) offers an interesting view towards the east that captures the Limestone Scarps and Dipslopes Character

<u>Subjective:</u> The viewpoint depicts a medium to large-scale, partially open landscape. In terms of variety, the combination of landscape features includes farm buildings, plantation woodland, occasional hedgerow trees, hedgerows and arable fields that present a simple, well-balanced composition. In terms of texture and colour, this is an intensively managed land use that is mainly muted but the strong presence of geometric woodlands adds some interest and sense of enclosure. Grass verges are also a feature of these local lanes that add a 'sense of place' and distinctive character, and the hedgerows have a good range of native species including hawthorn, elder, ash and dog rose. The bends in the road also add intimacy to the landscape.

Overall: The view is influenced by the woodlands on the horizon towards the east that form a significant component and add balance to the landscape. This location offers some intimacy since this is a local lane with little traffic and there is no major settlement to disrupt the tranquility. The field hedgerows are cut back, and the arable land use is intensively managed, however the mature ash trees within the hedgerows are a strong feature. The overall experience is pleasant, with some depth to views and strong contrasting features due to the presence of the plantation woodlands on the horizon and the slight undulations in topography. This is an isolated, remote location with a distinct absence of settlement, built form or other man-made features

#### Receptors

This viewpoint is representative of views available to walkers and horse riders travelling between the settlements of Willingham by Stow in the west and Fillingham in the east.

#### **Description of View:**

The foreground of the view comprises Fillingham Lane in the immediate context of large scale and expansive agricultural fields with a limited network of hedgerows. Further agricultural fields are visible beyond this since the landscape is gently undulating, and this local collection of fields are expansive and vast where the intervening hedgerows are absent allowing extended visibility. The middle and long distance therefore yields good visibility. To the right-hand side of the view, there is further collection of large-scale agricultural fields and to the left-hand side of the view there is a similar collection of fields. The remainder of the horizon is made up of farmsteads at Turpin Farm, Side Farm and North Farm, large scale agricultural fields with few hedgerows and so middle and distant views are filtered. There are vertical elements in the view that include agricultural buildings and associated agricultural infrastructure.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
In terms of forces for change for LCC-C-J, given the close	Scenic: There is a string of small, nucleated settlements	Range of Features: The location comprises the local road network	Embedded Mitigation would be taken into account at the
proximity to Gainsborough the main elements of	on the limestone capped scarp slope that add to the	that connects two settlements. This is a part enclosed location due	construction, operation (Year 1 and Year 15) and
change are the noise and visual intrusion of the traffic	sequence of views, and the same sequence applies to	to the hedgerows that are outgrown with some tall trees, which	decommissioning stages of the Scheme. This Embedded
using the A631. The impact on the local lanes that feed	the string of farmsteads on the east west minor road	helps to provide some intimacy. In terms of variety, the	Mitigation is also referred to as primary mitigation and
into the A631 is also a consideration such as locations	network.	combination of landscape features includes farm buildings,	would include the following measures:
close to Willingham by Stow, Fillingham Lane, the local		plantation woodland, occasional hedgerow trees, hedgerows and	Daniela ta la cata minima una af 15 ma fuera a disasert DD-W
road to Fillingham and Willingham Road.	<u>Cultural:</u> Where the farmhouses are set back from the	arable fields that present a simple, well-balanced composition.	Panels to be set a minimum of 15m from adjacent PRoW.
<b>Overall,</b> the susceptibility for LCC-C-J is conditioned by	roads, lines of trees such as horse chestnuts form distinctive features and where the farmhouse directly	Importance of View: This is a part enclosed location on the network	Panels to be set a minimum of 50m from adjacent residential
the aim to ensure that road improvements and	front the highway they are framed to each side with	of local lanes. This location offers some intimacy since this is a	property boundaries.
associated new development protect the character of	oak and polar species which stand out in the	local lane with little traffic and there is no major settlement to	property boundaries.
the local lanes from noise, visual intrusion and	landscape. Conifer species are also seen with the	disrupt the tranquility, which raises the importance of the view.	Panels to be set minimum of 20m from major watercourses
construction interventions. Pressure on the land for	large-scale agricultural buildings. This characteristic is		and minimum of 8m from minor watercourses.
arable agriculture and competing demands of farm	particularly noticeable along Fillingham Lane and	Number of Receptors: This is likely to attracts local users and those	
diversification are also leading to change to farmsteads	Willingham Road.	from the wider area who may be travelling between settlements.	Panels to be set a minimum of 3m from Site boundaries.
in quiet rural locations, which is causing significant			
change to the rural character of the area in some parts.	Natural: The quiet rural lanes provide opportunities for		Existing hedges are to be allowed to grow out and will be
The relevant characteristics of the landscape therefore	wildlife corridors across the area, especially where		managed to a height of 5m. Hedgerow trees will be
has a medium susceptibility to change without undue	they join with minor farm tracks and green lanes along		encouraged to grow out to add further thickening and growth
adverse effects given the tranquility of the areas away from the main road networks is under threat. The	Willingham Road.		to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of
balance between promoting industry, commerce and			existing hedges.
leisure and the impact on the rural settlements and	Recreation and Enjoyment: There are no PRoW and		existing neages.
local lanes is an important consideration, especially	recreation is provided by numerous small country		Lighting will be limited to downlights within substations and
where these features are in close proximity the larger	lanes. The slight turns and 'S' bends on the east-west minor road network helps with the appreciation of		battery banks only and used when maintenance or security is
settlements and market towns such as Gainsborough.	these views.		required. Lighting will be PIR operated and will be calibrated
	these views.		to vehicle and personnel movements. All visible lighting
	Local Distinctiveness and Sense of Place: The 'sense of		would be 50W, installed at a maximum height of 4m with
	place' is marked by the minor bend in the road, which		cowls fitted to prevent light spillage. Lighting required within
	is a distinctive feature of the east west road network,		panelled areas will be manually operated. There will be no
	which is typically straight.		lighting on perimeter fencing.
			The visual effects with any the Embedded Mitigation taken
	Health and Wellbeing: Willingham Road and Fillingham		The visual effects <b>with only</b> the Embedded Mitigation taken into account equate to those effects set out for the operation
	Lane is a quiet backwater relative to the B1241 to the		stage (Year 1) and this includes secondary mitigation which
	west and A15 to the east.		will have been carried out, but will have had limited physical
			or visual impact at this Embedded Mitigation stage
	Important Spatial Function: The long eastward views to		,
	the limestone capped scarp slope are key to the		
	spatial qualities of the area.		
	<b>Overall</b> , the value of LCC-C-J is shaped by the nature		
	of the predominantly rural and sparsely settled area		
	with dispersed farms. The east west local network of		
	lanes contrast with the B1241 to the west and the A15		
	to the east and the 'S' bends in the road helps with the		
	appreciation of the views towards the scarp slope and		
	the associated woodlands at Fillingham Castle.		
Medium	Medium	Medium	Not Applicable



## Viewpoint: LCC-C-J - Fillingham Lane

## Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened by the foreground hedgerows bordering Fillingham Lane. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows to the foreground and within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate north, east and west and the wider landscape to the northwest would not fundamentally change.

#### **Construction Access**

There would be no view of any construction access from this viewpoint due to its relatively enclosed nature.

### Operation (Year 1)

The foreground of the view comprising Fillingham Lane would not change but the immediate context of agricultural fields would change to an area of panels. Further agricultural fields beyond would also be screened by the new panels. The remainder of the horizon is made up of farmsteads at Turpin Farm, Side Farm and North Farm, large scale agricultural fields with few hedgerows and so middle and distant views are filtered towards the new area of panels. There are vertical elements in the view that include agricultural buildings and associated agricultural infrastructure, but they would not add cumulative changes to the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

Directly adjacent to this viewpoint a small belt of scattered trees is proposed in the foreground adjacent to the existing trees in the corner of field C1 adding to the overall bulk of vegetation in this location. A scattered tree belt is proposed within field C3 to the northeast of this viewpoint linking an existing lone tree to the hedgerow to the north. Another belt links a tree in field C4 to the eastern boundary of this field.

#### Shelterbelt

A 5m shelterbelt is proposed to the north and west of Turnpins Bungalows and to the south and west of Turnpin Farm to mitigate views of the Scheme from these properties. A long shelterbelt will run west/east to the north of field C5 adjacent to the existing waterway creating a strong break across this large field and adding height and variation to the views across the Site.

#### **Existing hedges**

Existing hedgerows along the Willingham Road are to be managed to grow out with the addition of irregularly spaced hedgerow trees as appropriate to increase the tree cover locally and provide height and further screening whilst retaining the overall character of this road.

#### New hedges

A new hedgerow to two sections of the northern boundary of field C3 are proposed where none exists mitigating views of the Site from the wider landscape to the north and joining the existing hedgerow. Further east, new field hedges to the west and east of field C9 will strengthen the field pattern locally whilst also further mitigating views from Turpin's Farm and bungalows as well as views from the east along Willingham Road. A new hedgerow to the west of field C2 will mitigate views from the west and north and help to further strengthen the field structure locally, providing additional height with proposed hedgerow trees. A new hedge is proposed to the southern boundary of field C5 and the eastern boundary of C6 which will further reinforce the field pattern and break up the bulk of the paneled area.

#### Successional scrub

A belt of successional scrub is proposed to the western boundary of field C3 adjacent to existing vegetation on this western boundary of the Site. A strong buffer of successional scrub is proposed to run north/south and east either side of existing vegetation within fields C2,5 and 6 providing a layered visual effect and creating a natural buffer to this woodland block and increasing its overall mass.

#### Grassland mixes

A 10m tall herb mix buffer is to line each side of the existing watercourse running across the Site. Elsewhere within the field boundaries, flower rich pollinator mixes are to be used with tussock mixes used adjacent to existing and proposed vegetation in places.

Margin verge habitat

# Operation (Year 15)

With secondary mitigation such as planting

and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

The view will become more enclosed since the proposed scattered trees and shelterbelt will

The view will become more enclosed since the proposed scattered trees and shelterbelt will have established to create a strong field structure and screen views of the Scheme in the mid distance. Existing hedges around the Site will have been managed to grow out to 5m reinforcing the vertical structure locally. In the close-range, the existing hedgerows will screen the Scheme with mid and longer distance views appearing as a layered well-treed landscape with a backdrop of local and distant woodland. Roadside verges along Willingham Road to the east will have established to create a more natural and visually pleasing route.

Overall, in terms of mitigation for the Cottam 1 North Site, due to the close proximity to the market town of Gainsborough, the aim is to conserve the rural settlement pattern of the outlying villages. Any development should be complimentary to intrinsic local character and the nucleated form of the settlements is a key feature, especially in long views across the area. Mitigation measures should also aim to minimize car use to protect the tranquility of the area and any development should consider well designed green infrastructure.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural)
   management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns

of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning

activities, dust

runoff.

generation and site

**Decommissioning** 

A similar process to that





	Cable Route/s Viewpoint is outside of the 0.5km study area and there would be no view of this route.  Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1 due to the relatively enclosed nature of this viewpoint.	To the north of the Willingham Road adjacent to the viewpoint, an enhanced roadside margin habitat is proposed to mitigate the erosion of good quality roadside verges in this area to create a more visually pleasing and natural view.  Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	<ul> <li>Bird mitigation fields</li> <li>Significantly improved biodiversity</li> <li>Growth of existing and proposed vegetation is assumed to be:</li> <li>Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.</li> <li>New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.</li> <li>Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.</li> <li>Shrubs: 0.9m at Year 1 and 5m at Year 15.</li> </ul>	With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.
Magnitude	Medium	High-Medium	Medium	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Significance of Effect	Moderate <b>Significant</b>	Moderate-Major <b>Significant</b>	Moderate <b>Significant</b>	Minor <b>Not Significant</b>



Viewpoint: Lo	LCC-C-J – Fillingham Lane		
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	In Cummany	In Cummany	
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance, the foreground hedgerow, the framing tree cover to each side of the viewpoint. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint LCC-C-J of the substation and Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and proximity of the receptor to the Sites. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.  Viewpoint LCC-C-J is located approximately 3.09km from the closest Cumulative Development Gate Burton Solar Site, however due to the built form associated with the settlement of Willingham by Stow no intervisibility is anticipated.	
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]	
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.	
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.	
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low	
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Operation (Year 15): Adverse & Long Term Decommissioning: Neutral & Short Term	
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant	



## Viewpoint: LCC-C-K - Fillingham Lane

#### **Receptor Baseline:**

This viewpoint is located on Fillingham Lane, looking south over the Cottam 1 North Site with the Cottam 1 South Site beyond. The viewpoint is also looking east over the Cottam 1 North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying almost flat landscape within the wider context of a rolling lowland. Fillingham Lane is a prominent feature in the view as it is a major route that connects Fillingham with Willingham by Stow. The land use is mainly productive arable farmland with many of the large fields under single crop. There is some deciduous woodland such as Normanby Gorse to the southeast, and tree and woodland cover at the edge of the settlement of Willingham by Stow. There are clear and uninterrupted views to the northeast (left of view) towards Heaton's Wood, Top Wood, Big Wood, and Oak Wood. Views to the south are limited due to the hedgerows to the south of Fillingham Lane. Normanby Gorse is also visible on the horizon to the south. Isolated trees are notable in the foreground of the view and also to the south of Fillingham Lane with a few running along Stone Pit Lane. In terms of man-made elements, Fillingham Lane is prominent as a typical east west road running across the landscape, otherwise there are some residential properties along Fillingham Lane, including The Cottage and Carisbrook. The bridge crossing with the River Till tributary has green balustrade railings with concrete piers and is also a detractor in the view.

<u>Subjective:</u> The viewpoint depicts an exposed, large-scale landscape that is open in nature, but at close range there are some small-scale field systems with some tree cover at the edge of the settlement. In terms of variety, the landscape is uniform and mostly consistent and there are wide grass verges that separate the road from the hedgerows. There are also individual ash trees within the hedgerows that add to the character. This is a simple landscape that is balanced with strong hedgerows and some tree cover on the horizon including poplar shelterbelts and small coverts. In terms of texture and colour, the vegetation is well-managed and has muted tones. The proximity to the road network and settlement at Willingham by Stow (right of view) provides some sense of security and familiarity.

<u>Overall:</u> The viewpoint is influenced by the presence of Fillingham Lane, which is a long straight road. There is a local bridge crossing a tributary of the River Till, which is set with a small group of ash trees that provides a distinctive 'sense of place'. The experience is interesting and pleasant and there is intimacy at this location due to the close proximity to the settlement edge. There are also distant glimpsed views towards the Scarps and Dipslopes Character Area 6a where the woodlands at Ingham Cliff crown the horizon.

#### **Receptors:**

This viewpoint is representative of views available to users of Fillingham Lane travelling from Willingham by Stow in the west to Fillingham in the east.

#### **Description of View:**

The foreground of the view comprises Fillingham Lane set in the context of an agricultural landscape with hedgerows to each side. Further agricultural fields are hardly visible beyond since this local collection of fields has a number well-established and dense hedgerows with some mature trees and there are also intermittent residential properties and farmsteads to each side of the lane that close down views towards the outlying landscape. The middle and long distance therefore yields limited visibility across the agricultural fields. To the right-hand side of the view, there are strong hedgerows and tree cover dividing a collection of elongated agricultural fields. To the left-hand side of the view there is a similar collection of agricultural fields, but the presence of larger scale fields impacts on their presence. The remainder of the horizon is made up of hedgerows, agricultural fields, and woodlands where visibility towards the middle and long distance is hardly evident due to the strong hedgerow network and foreground properties.



works and active sand and gravel extraction sites. The aim should be to manage and further enhance access via the network of quiet lanes, villages, flootpaths, and water courses. Extension of the non-word network, especially where it can link people to the river corridors and other areas for recreation.  **Overall, the susceptibility for LCC-C-K is conditioned by the aim is to ensure new developments are well-integrated with well designed, green infrastructure and resist new development that threatens tranquility. The aim is to ensure new development to take place within the existing curtilage of settlements. Enhancing and promotting access to river corridors for recreation and health benefits. The relevant characteristics of the landscape tensor the strong yn ucleated character by encouraging new development to take place within the existing curtilage of settlements. Enhancing and health benefits. The relevant characteristics of the landscape tensor the strong without undue adverse effects given the service of the undersome and health benefits. The relevant characteristics of the landscape tensor in the view. The view is important of the view. The view is influenced by the presence of the combination of features, and they are experienced in both the closer-range and distant context of the Unwooded Vales Character Area 4a.  **Local Distinctiveness and Sense of Place** A regular pattern of medium to large fields are enclosed by hawshorn hedges. Where the recreational and health benefits. The relevant characteristics of the landscape tensor given of features, and they are experienced in both the closer-range and distant context of the Unwooded Vales Character Area 4a.  **Lighting will be limited to downlights within substations and bearing to the field boundaries. Where the local road exist the settlement, which slightly raises the level of the view. The view is important on the local road exists the settlement, which slightly raises the level of the view. The view is importance of features and the view. The view	Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
'sense of place' in parts. The presence of patches of smaller scale field systems helps to enhance the 'sense of place'.  or visual impact at this Embedded Mitigation stage.	expansion on the edge of the main settlements has eroded the predominantly rural character. While the power stations and sugar beet factory provide a sense of place, their scale is very dominant. This is especially relevant to the coal powered power stations that stand in the flat low-lying landscape. Other major industrial developments are focused along the Trent flood plain corridor including industrial estates, sewage treatment works and active sand and gravel extraction sites. The aim should be to manage and further enhance access via the network of quiet lanes, villages, footpaths, and watercourses. Extension of the non-road network, especially where it can link people to the river corridors and other areas for recreation.  Overall, the susceptibility for LCC-C-K is conditioned by the aim is to ensure new developments are well-integrated with well designed, green infrastructure and resist new development that threatens tranquility. The aim is also to conserve the strongly nucleated character by encouraging new development to take place within the existing curtilage of settlements. Enhancing and promoting access to river corridors for recreation and health benefits. The relevant characteristics of the landscape therefore have some ability to accommodate change without undue adverse effects given the sensitivity of the rural roads and minor farm tracks. The edges of the villages, the sequence of views to the churches and the avenues and lines of trees on the approaches to farms are also sensitive features. The balance between clustered villages and their adjacent,	used for growing cereals, oilseeds, and other arable crops. The landscape reveals views of an open nature beneath vast skies that are often extensive and uninterrupted, but some views are enclosed where farm buildings prevail.  Cultural: A predominantly rural and sparsely settled area with small villages and dispersed farms and residential dwellings linked by long straight roads (such as Fillingham Lane).  Natural: Very little semi-natural habitat remains across the area, apart from habitat associated with the River Till and its tributaries, and green lanes which link to this asset are an important feature of the landscape.  Recreation and Enjoyment: The public right of way (PRoW) network is limited apart from a few north south routes that connect between the long straight roads running east to west across the area.  Local Distinctiveness and Sense of Place: A regular pattern of medium to large fields are enclosed by hawthorn hedges. Where the recreational network gives access to appreciate this feature this gives a strong sense of identity to views.  Health and Wellbeing: Access to these remote areas is mainly confined to the long, straight roads since PRoW connections are limited across the area.  Important Spatial Function: The predominance of large-scale agriculture and limited settlement and development provides an important spatial function, but the footpath and bridleway network are important to this spatial function.  Overall, the value of Viewpoint LCC-C-K is shaped by this area being extensively farmed over a long period, where very little semi-natural	local road network at the point where the route exits the settlement. This is an open location where the low-cut hedgerows, small woodland blocks and riparian vegetation lining the minor tributary of the River Till add some structure to the landscape and help close down visibility. The hedgerows, the woodland cover, the riparian vegetation, and the scattered farmsteads are the range of features in the view.  Importance of View: This is an open location at a point where the local road exits the settlement, which slightly raises the level of importance of the view. The view is influenced by the presence of the combination of features, and they are experienced in both the close-range and distant context of the Unwooded Vales Character Area 4a.  Number of Receptors: This is the local network that has connections between small settlements. This route is likely to appeal to a limited range of receptors, possibly confined to local users. The strategic major road network is defined by important historic routes (north south) and the strategic minor road network also links several historic and distinctive smaller string of settlements (east west) across the area. This local lane could enhance these connections for recreation and	construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:  Panels to be set a minimum of 15m from adjacent PRoW.  Panels to be set a minimum of 50m from adjacent residential property boundaries.  Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.  Panels to be set a minimum of 3m from Site boundaries.  Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.  Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.  The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which
I Medium to High I Medium to High I Medium to High	Medium		Medium to High	or visual impact at this Embedded Mitigation stage.  Not Applicable



## **Viewpoint: LCC-C-K - Fillingham Lane**

## Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Thorpe Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the riparian vegetation bordering the River Till would provide some screening such that these activities would be confined to a narrower section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and east of Thorpe Lane.

#### **Construction Access**

There would be no view of any construction access from this viewpoint due to its relatively enclosed nature.

#### Cable Route/s

Viewpoint is outside of the 0.5km study area and there would be no view of this route.

#### **Substation**

#### **Operation (Year 1)**

The foreground of the view comprising Fillingham Lane set in the context of an agricultural landscape with hedgerows to each side would not change. Further agricultural fields are hardly visible beyond since this local collection of fields has a number wellestablished and dense hedgerows and this feature would not change. To the right-hand side of the view, there are strong hedgerows and tree cover dividing a collection of elongated agricultural fields, which would not be affected by the panel areas. To the left-hand side of the view there is a similar collection of agricultural fields, and this would not be affected. The remainder of the horizon to the north is made up of hedgerows, agricultural fields, and woodlands where visibility towards the middle and long distance is hardly evident due to the strong hedgerow network and foreground properties and this would not alter.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered Tree Belts

Looking further east and north east, a number of small belts of scattered trees are proposed to incorporate lone field trees into the landscape. A small block to the northwest of field C1 augments the existing trees in this location.

#### <u>Shelterbelt</u>

A shelterbelt is proposed to the southern boundary of fields G1 and G3 mitigating views across the Site to the southeast and further breaking up the Scheme.

#### Existing hedges

The existing northern and western field boundaries to fields G1 and G2 require some enhancement where these are low managed hedges with limited hedgerow trees. These hedges are to be allowed to grow out and managed to a height of 5m with the addition of hedgerow trees to enhance the character locally and to add further height and screening from the north and west at Stonepit Lane and from the village of Willingham by Stow.

Reinforce hedgerow to the north of fields G1 and G2 to mitigate views from Fillingham Lane and properties to the east of Willingham by Stow settlement.

The eastern boundary of field G4 is to be enhanced with additional tree planting and by allowing the hedgerow to grow out to a height of 5m.

## **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, the proposed new hedgerows will have established to create a strong field structure and screen views of the Site/Sites. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the close-range, the hedgerows will screen the Scheme with mid and longer distance views appearing as a layered well-treed landscape with mid-range views comprising relatively good levels of tree cover over the local landscape but with very limited long-distance views.

This viewpoint is located relatively near the built-up area of Willingham by Stow to the northwest of the Cottam 1 Site/Sites set back a little from the Cottam 1 West Site on the Fillingham Lane overlooking arable fields in the foreground.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.

Shrubs: 0.9m at Year 1 and 5m at Year 15.

## Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



Significance of Effect	Minor Not Significant	Moderate Significant	Minor <b>Not Significant</b>	Minor <b>Not Significant</b>
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Magnitude	Low	Medium	Low	Low
	This viewpoint is within the 2km study area and has a direct view of Cottam 1 substation in the mid-distance.	Views further east of the Cottam 1 Site/Siteswill also be screened by these enhanced hedgerows.  New hedges A new hedge is proposed to the western boundary of G4 in addition to the existing hedge on this boundary. Additional new hedge planting to the southern boundary will infill where none currently exists with the remainder of the existing hedge being enhanced as necessary.  A new hedge is proposed to the west of field C1 mitigating views east of a small section of panels to the west of a band of trees which help to obscure the majority of the Site further east.  Grassland mixes A minimum 10m buffer is to be provided around existing ditches which are to be seeded with a tall herb mix.  Flower rich pollinator mix is to be used within 10m of existing services. This is also proposed around other field boundaries which are predominantly south or west facing or relatively open where they will thrive.  Elsewhere around the Site, both tussock and flower rich pollinator mixes are to be used at the base of all existing and proposed hedges around field boundaries creating a rich tapestry of vegetation.  Adverse effects:  Panels and structures across the landscape Increased hard standing areas Increased traffic locally Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure structures visible above existing vegetation		



Viewpoint: Lo	ewpoint: LCC-C-K - Fillingham Lane		
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening	In Summary  The Cumulative Effects upon viewpoint LCC-C-K of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.	
	vegetation cover. Therefore, there no in combination visual effects are anticipated.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
	underpated.	There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]	
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.	
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.	
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low	
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term	
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant	



#### **Viewpoint: LCC-C-T - Kirton Road**

#### **Viewpoint Baseline:**

The view is located on Kirton Road, looking northeast directly over the Cottam 3a Site and southeast towards the Cottam 3b Site. The view is also looking south towards the Cottam 2 Site with the Cottam 1 North Site beyond.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a very slightly undulating, plateau landscape within the wider context of a broad vale, which is not that conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop but with former airfields on these plateau locations and the settlement of Blyton to the west. Beyond the plateau there are some local variations in landform where the land falls to the west just beyond the A159 at Laughton Common and Laughton Woods (recreational woodland). To the north, the land rises towards Scotton at approximately 20m AOD, but there are also small variations in landform between to take account of several watercourses including Northorpe Beck and its tributaries. To the south the landform extends from the plateau as generally flat until there is a gentle rise to the settlement of Aisby at approximately 20m AOD. The landform also rises towards the east (right of view) towards Northorpe and Northorpe of Kirton in Lindsay occupies higher elevation at approximately 60m AOD. In terms of enclosure, there are several woodland blocks or shelterbelts in the wider landscape including woodland at Northorpe and Northorpe Hall to the east and the expansive Laughton Woods to the west and north of the Site/Sites. To the south, the vegetation along the mainline railway and the tall shelterbelts in the field systems to the northeast of Top Farm are the prominent feature. The woodland associated with the burial site to the north of the Site/Sites also closes down views in this direction. At closer proximity, there is some woodland around the settlement of Blyton and around Blyton Grange, Grange Farm, Top Farm and Southorpe Farm which adds some enclosure. The riews are mainly open at this location with most of the visibility extending towards the east, with limited visibility to the west, south an

<u>Subjective:</u> The viewpoint depicts a medium-scale, partially open landscape. In terms of variety, the residential properties are the main feature and the low-cut hedgerows along the Kirton Road frontage allow open visibility across the landscape towards the east and southeast. There is a strong line of mature tree and scrub cover along both sides of the mainline railway but the further hedgerows and tree cover within the small collection of fields to the northeast of Top Farm fall below the horizon. In terms of texture and colour, the vegetation along the railway supports a wider variety of species than the low-cut hedgerows and is grown out in parts with an interesting texture on the skyline, and there are also colourful tones due to the presence of the residential properties of Blyton. Masts, poles, and electricity pylons are also prominent features. The views are interesting and pleasant in the immediate context of the Site/Sites due the open context and the extended views along Kirton Road that show a strong visual relationship between the green heart (internal field systems) of Blyton to the east of the war memorial.

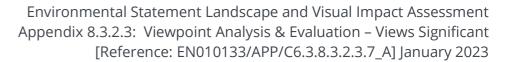
Overall: The view is influenced by the open nature of the location and the visual relationship between the heart of the settlement at the war memorial and this location. Although Kirton Road is defined by strong hedgerows they are low-cut, but the hedgerow trees are strong and this gives some visual comfort to the route (given that it is a long straight road with fast moving traffic and no footways, with only narrow grass verges). The existing vegetation bordering the mainline railway is the appealing feature of the view along with the views to the heart of the settlement. The small woodland block to the west boundary of the Site/Sites is prominent from this viewpoint on the horizon and the nearby conifer shelter belt just falls below the horizon behind the intervening hedgerows. The viewpoint offers some interesting and attractive features locally, including intervisibility between the heart of the village and the landscape to the east. The overall experience is that of a pleasant location with overwhelming feelings of familiarity and comfort.

#### Receptors:

This viewpoint is representative of views available to walkers, motorists, and residents along Kirton Road. And to users of the airfield.

#### **Description of View:**

The foreground of the view comprises Kirton Road in the immediate context of agricultural fields and the Blyton Park Racing Centre, which lies beyond. Further agricultural fields are not visible beyond this since the landscape is flat, this local collection of fields are expansive and vast where the intervening hedgerows close down visibility. The middle and long distance therefore yields limited visibility across these agricultural fields and the Blyton Park Driving Centre. To the right-hand side of the view, there is Kirton Road as it takes a straight course and to the left-hand side of the view there is Kirton Road with groups and individual trees along its verges. The remainder of the horizon is made up of large-scale arable fields where hedgerows are well established but middle and distant views are not possible. There are vertical elements in the view, including power lines, the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables, and these are not notable elements due to the groups and individual trees lining Kirton Road.





Medium

#### **Receptor susceptibility to change**

In terms of forces for change for LCC-C-T, there are challenges in conserving the tranquility of the area. Road construction, car use and disturbance have made an impact. Sustainable transport options and well-designed green infrastructure are likely to take some pressures away from the main settlements and roads that traverse the area. The distinctive long straight Roman roads and their 'east-west' connections form the basis of current road networks and are at risk of losing their character.

**Overall,** the susceptibility for LCC-C-T is conditioned by the relative lack of road connectivity east to west. Driving north to south across the area is generally straightforward as the A156 runs true to the River Trent and the A15 and B1398 follow the limestone capped scarp slope to the east. Most of the developed settlements are near these roads, however narrow country lanes link east west and this direction of travel is slightly more challenging. The relevant characteristics of the landscape therefore have a medium susceptibility to change without undue adverse effects given there is scope to protect the character and diversity of the road networks through the conservation and enhancement of the rural roads. These minor tracks, lanes and farm roads are often bordered by tall hedgerows and wide verges and evidence of Roman influence through Medieval settlement is also present through abandoned villages and medieval settlements, such as Coates.

#### Value of view

<u>Scenic:</u> Local views towards the east are a key feature. The view is influenced by the open nature of the location and the visual relationship between the heart of the settlement at the war memorial and this viewpoint.

<u>Cultural:</u> The wider landscape setting of the settlements is hardly evident in this view or the visual relationships between adjoining Area of Greater Landscape Value (AGLV).

<u>Natural:</u> The views tend to be interesting and comfortable due the relationship with the edge of settlement. The discordant uses within the airfield, which detract from the natural qualities of the landscape are hardly evident from this location.

<u>Recreation and Enjoyment:</u> The Blyton Park Driving Centre is the key recreational resource, but its relationship with the landscape setting of Blyton is marred by the discordant uses.

<u>Local Distinctiveness and Sense of Place:</u> The presence of individual field boundary oak/ash trees is a key feature of the location as a significant group. Even the relatively nondescript occasional trees seen in isolation make a crucial contribution to this location.

<u>Health and Wellbeing:</u> Although Kirton Road is defined by strong hedgerows, they are low-cut, but the hedgerow trees are strong and this gives some visual comfort and feeling of well-being to the route (given that it is a long straight road with fast moving traffic and no footways, with only narrow grass verges).

Important Spatial Function: There are different landscape patterns that typify the differing landscape character and its contribution to spatial function. This is particularly noticeable where the baseline views change dramatically between the settlement and just outside its boundary where the strong vegetation along the mainline railway has a strong influence.

**Overall**, the value of LCC-C-T is shaped by the strong hedgerow and mature tree cover that is prominent to the north side of Kirton Road. The former airbase uses are not evident from this location and the landscape setting of Blyton is not adversely influenced by its presence. This is a noticeable difference where the baseline views change dramatically between the edge of settlement and the outlying landscape where the vegetation along the mainline railway has an influence.

#### Sensitivity

Range of Features: The location comprises the local road network at the gateway and the edge of a settlement. This is a part open location due to the hedgerows that are well cut back, which helps to provide extended views, but the vegetation bordering the mainline railway helps to close down views at this location. In terms of variety, the residential properties are the main feature and the low-cut hedgerows along the Kirton Road frontage allow open visibility across the landscape towards the east and southeast. There is a strong line of mature tree and scrub cover along both sides of the mainline railway but the further hedgerows and tree cover within the small collection of fields to the northeast of Top Farm fall below the horizon.

Importance of View: This is a part open location on the local road network. The views tend to be attractive and offer some interesting and attractive features locally, including intervisibility between the heart of the village and the landscape to the east. The overall experience is that of a pleasant location with overwhelming feelings of familiarity and comfort, which raises the importance of the view.

Number of Receptors: This is the local road network that attracts local users but is also likely to attract users from the wider area since this is a secondary road with connections to Kirton in Lindsey. Overall, this is a gateway to the settlement, which raises the importance of the view.

### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Medium Medium Not Applicable





#### **Viewpoint: LCC-C-T - Kirton Road**

#### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened by the foreground hedgerows bordering Kirton Road. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows to the foreground and within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate south, east and west of this location and the wider landscape to the southwest would also not see a fundamental change.

#### **Construction Access**

All throughout the construction stage the viewpoint will be affected due Kirton Road B1205 having 2 points of access into the Cottam 3a Site. The first access point is through Kirton Road as it connects to fields K3 and K4. The second access point is through Kirton Road as it connects to field K12. These two access points

#### **Operation (Year 1)**

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered native trees

Views from the B1205 Kirton Road looking north will be mitigated by the proposed scattered native trees along the southern boundary to field K1 some 500m distant. This will provide a strong structural buffer and appropriate tree planting relatively close to the built-up area of Blyton in line with character assessment objectives.

#### **Existing vegetation**

Existing vegetation to the northeast of this viewpoint along Kirton Road will be augmented with irregular spaced native hedgerow trees species to infill tree cover and provide additional height as well as increasing the ecological value and range of species to the existing block of vegetation and hedgerows. Proposed Site fencing will sit 8m north of the existing roadside vegetation with panels set 20m from this roadside.

Additional enhancement planting will be provided to the western boundary of field K1 where it abuts the Laughton Road where additional hedgerow trees will augment the local tree cover and existing hedges will be allowed to grow out and be managed to a height of 5m where the wide road verge allows. Views to the east will be mitigated where the land falls away a little over the Site in the east.

#### Successional scrub planting

Successional scrub planting, extending to 35m wide at its widest, will run north/south to the western boundary of field K3 adjoining existing vegetation and running over existing underground services. Adjacent to the road and up to the small wooded area, the existing hedge will also be reinforced by irregularly spaced native hedgerow trees to mitigate views east from this viewpoint and from dwellings further west along Kirton Road. Site fencing will sit to the east of this scrub planting and will not be visible from the west. Further east along Kirton Road, a buffer of successional scrub planting, together with a proposed native hedge with hedgerow trees will augment this roadside boundary where existing vegetation is more sparce, reducing overall views of the Site from the south and west and where panels sit a little closer to the roadside. Further along Kirton Road to the east, an existing roadway will be utilized running north from the road into the Site.

#### **Existing hedgerows**

Existing gaps within the roadside hedgerows to be infilled with mixed native hedgerow species. Looking south towards Cotham 3b and 2, the roadside vegetation will be retained as existing in order to maintain the open character of the views to the south.

#### **Grassland mixes**

Panels will sit over a proposed wildflower grassland mix, whilst a min. 10m buffer zone around existing overhead cables will be seeded with a flower-rich pollinator mix which will also extend around proposed access/Site roads.

#### New hedgerows

To the eastern and western boundaries of the existing buildings on the runway, mixed native hedgerows with irregular spaced hedgerow trees will augment the existing cover, provide height and help to soften both the airfield buildings and the panels from view.

Adverse effects:

- Panels and structures across the landscape
- Increased hard standing areas
- Increased traffic locally
- Some minor light pollution within open countryside

## Operation (Year 15)

Secondary mitigation such as planting, and grass seeding would be taken into account at this stage to include the following changes to the landscape:

The view will become more enclosed since the existing hedgerows will have been managed to outgrow to a height of 5m, new planting will have established with scattered trees beginning to provide some good cover and proposed hedges and scrub planting will be established. Close range views will be of scrub and scattered trees breaking up the immediate views with enhanced hedgerows across the Site helping to increase the tree cover around settlements. Longer distance views will be of layered vegetation of existing and proposed hedgerows with trees with a wooded horizon where glimpses exist across the landscape.

Overall, in terms of mitigation for the Cottam 3a Site, many of the rural villages have not seen widespread expansion but development pressures continue with the demand for housing, commerce and industry is creating visual intrusion and extending the urban fringe. For development associated with the rural villages, specific mechanisms include Village Design Statements, and tree planting around settlement fringes to help integrate new development into the landscape.

Between Years 1 and 15, the following effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural)
   management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust

generation and site

runoff.

**Decommissioning** 





	will make Kirton Road busy during the construction stages and will affect the view.  Cable Route Corridor Viewpoint is within 0.5km study area and will experience effects at construction stage.  Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 3a due to the intervening existing vegetation.	Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	<ul> <li>Reinstatement of historic field patterns</li> <li>Bird mitigation fields</li> <li>Significantly improved biodiversity</li> <li>Growth of existing and proposed vegetation is assumed to be:</li> <li>Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.</li> <li>New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.</li> <li>Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.</li> <li>Shrubs: 0.9m at Year 1 and 5m at Year 15.</li> </ul>	With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.
Magnitude	Medium	High	Medium	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Significance of Effect	Moderate <b>Significant</b>	Moderate-Major <b>Significant</b>	Moderate <b>Significant</b>	Minor <b>Not Significant</b>



Viewpoint: LC	wpoint: LCC-C-T – Kirton Road			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary	In Summary		
	There would be no intervisibility between the 3a and Cottam 2 Sites due to distance, the intervening vegetation along the mainline railway and additional intervening settlement, hedgerows, and tree cover.	The Cumulative Effects upon viewpoint LCC-C-T of the Cumulative Developments is Minor at year 1 of operation and Minor at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation, Embedded and		
	Cottam 3a Site, the Cottam 3b Site occupies only a very small portion of the view due to the intervening	Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects.		
	vegetation along the mainline railway and foreground hedgerows and tree cover and would not result in	<u>Fabric of the Landscape</u>		
	a highly noticeable change to the view's composition. There would be a small change to existing landscape elements beyond the railway line by the addition of the area of panels in place of an arable field, but the visually detectable impacts do not alter the baseline of the receptor materially.	There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
	field, but the visually detectable impacts do not after the baseline of the receptor materially.	There would be the introduction of new elements and features comprising the solar panel areas and the substation area.		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]		
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.		
	Construction: Low-Medium	Construction: Low		
	Operation (Year 1): Low-Medium	Operation (Year 1): Low		
	Operation (Year 1): with only Embedded Mitigation: Low-Medium	Operation (Year 1): with only Embedded Mitigation: Low		
	Operation (Year 15): Low-Medium	Operation (Year 15): Low		
	Decommissioning: Low-Medium  Construction: Adverse & Short Term	Decommissioning: Low Construction: Adverse & Short Term		
_	Operation (Year 1): Adverse & Long Term	Operation (Year 1): Adverse & Long Term		
IVDEOL	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	Operation (Year 1): With only Embedded Mitigation: Adverse & Long Term		
Effect	Operation (Year 15): Adverse & Long Term	Operation (Year 15): Adverse & Long Term		
	Decommissioning: Adverse & Short Term	Decommissioning: Neutral & Short Term		
	Construction: Minor-Moderate <b>Not Significant</b>	Construction: Minor <b>Not Significant</b>		
Cignificance	Operation (Year 1): Minor-Moderate <b>Not Significant</b>	Operation (Year 1): Minor <b>Not Significant</b>		
Significance	Operation (Year 1): with only Embedded Mitigation: Minor-Moderate Not Significant	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant		
of Effort	Operation (Year 15): Minor-Moderate <b>Not Significant</b>	Operation (Year 15): Minor <b>Not Significant</b>		
	Decommissioning: Minor-Moderate <b>Not Significant</b>	Decommissioning: Minor <b>Not Significant</b>		



### **Viewpoint VP4 - Thorpe Lane, Local Bridge**

### **Viewpoint Baseline:**

The view is located on Thorpe Lane, looking north with the southern extent of the Cottam South 1 Site in the foreground.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying almost flat landscape within the wider context of a broad vale, which is conspicuous in this view. The land use is mainly productive arable farmland with many of the large fields under single crop. There is deciduous woodland including Thorpe Wood that is only just visible on the distant horizon. The lack of a hedgerow field boundary to the north side of the lane allows direct views across the open fields. The pattern of drainage is a key feature at this location and a small tributary of the River Till is notable to the west (left of the view) as it forms a meandering course along the eastern edge of the Site/Sites. This watercourse crosses beneath the lane at this local bridge and then takes a meandering course towards the northeast. The watercourse winds through the landscape and is only just discernable by its tracing of alder and willow trees that soften the skyline. In terms of man-made elements, mast and poles are evident in the distance following the route of Thorpe Lane to the east (right of view) in the foreground and farm buildings at Clandon House to the west (left of view) add interest in the landscape (with being shrouded in tree cover).

<u>Subjective:</u> The viewpoint depicts an exposed large-scale landscape, that is extensive due to the absence of hedgerows. In terms of variety, although the landscape is uniform and mostly consistent, it lacks interest and balance since there are no strong vertical features. In terms of texture and colour, the fields are under single crop, and this gives a monochrome appearance to the view, and an overriding impression of being an ordinary landscape.

<u>Overall:</u> The view is influenced by the presence of the small tributary of the River Till that passes beneath the lane at this local bridge. The watercourse is distinguished by the presence of rusty pastures and localized concentrations of riparian tree cover that soften the skyline in what is an otherwise open and featureless landscape. There are intensive levels of management within this arable farmland that add some decline to the natural qualities of the view. The overall impression are views over a simple calm landscape at a local vantage point on Thorpe Lane.

### Receptors

This viewpoint is representative of views available to users travelling on Thorpe Lane. This section of the lane leads from Sturton by Stow in the west towards Brattleby in the east and is host to a variety of users including cyclists, horse riders and walkers.

### **Description of View:**

The foreground of the view comprises a large flat agricultural field with a newly planted hedgerow, a second agricultural field is visible beyond this. In the middle distance, to the centre there are woodlands comprising Thorpe Wood and Brattleby Thorns visible amongst hedgerows and hedgerow trees. To the right-hand side of the view, Thorpe Lane leads towards Brattleby where the roadside hedgerows and verges are visible and close down views in that direction. The remainder of the horizon is made up of trees, farm buildings and telegraph poles in the middle and long distance. There are some vertical elements in the view, including telegraph poles and associated cables in the distance and right-hand side of the view, but these are very minor elements in the context of the wider landscape.





### Receptor susceptibility to change

# In terms of forces for change for VP4, the flood plains are distinctive features, however, the rivers themselves, such as the River Till are not visually prominent in the wider landscape and are often hidden from view by levees or lack of riparian vegetation. There are also issues with water quality on much of the River Till, caused by run-off from agricultural land, physical modification of the river channel, and discharges from sewage treatment works.

**Overall,** the susceptibility for VP4 is conditioned by

by the watercourses where they flow largely unnoticed through the landscape marked only by a fringe of scattered trees and riparian vegetation. However, there is an opportunity to reconnect the rivers with their flood plains and restore and create a mosaic of wetland and flood plain habitats including grazing marsh, pastures, fens, reedbeds, wet woodland and eutrophic standing waters. The relevant characteristics of the landscape therefore have a high susceptibility to change without undue adverse effects given there is scope to manage the link and extend existing habitats and make more space for the natural development of the watercourses and their associated topographical features.

### Value of view

# <u>Scenic:</u> This location appeals to the visual senses where Thorpe Lane and a small tributary of the River Till combine to give a subtle grain to the landscape. The interruptions at this bridge crossings provides local points of interest and the opportunity to capture views across the landscape to the higher landform fringing the Vales.

Sensitivity

<u>Cultural:</u> The landscape shows evidence of historic settlement with farms and nucleated villages and small hamlets such as Thorpe le Fallows to the west.

<u>Natural:</u> The extensive expanses of semi-natural habitat, rivers, and streams are an important landscape feature such the River Till where the course can be observed by tracing sinuous belts of riparian habit and riverside trees.

<u>Recreation and Enjoyment:</u> Whilst the landform of the Unwooded Vales Character Area 4a is typically low and subdued, rising landform often provides locations where glimpses of neighboring elevated land are often sufficient to add to the recreation and enjoyment of the area. Typically, these locations occur around Thorpe le Fallows and along Thorpe Lane.

<u>Local Distinctiveness and Sense of Place</u>: The landscape has a 'strong sense of place' with major landform features flanking the lower lying areas creating a broad scale visual containment along the ridgeline to the east at Cammeringham, Ingham and Fillingham.

<u>Health and Wellbeing:</u> The Unwooded Vales Character Area 4a provides a very limited network of PRoW with a dependence on the more direct arterial routes that run east to west across the area linked by a series of narrow straight lanes such as Thorpe Lane.

<u>Important Spatial Function:</u> Despite the low levels of woodland cover, the landscape benefits from high levels of visual containment at these bridge crossings, where the roadside hedgerows and riparian vegetation create visual containment.

**Overall,** the value of Viewpoint VP04 is shaped by the interruption at the local bridge crossing on Thorpe Lane, that provides a local point of interest and the opportunity to capture views across the landscape to higher landform fringing the Vales. In contrast, the lower lying areas at such bridge crossings support intact hedgerows and belts of riverside trees that truncate views and give a feeling of intimacy, enclosure and 'sense of place'.

### **Embedded Mitigation**

Range of Features: The location comprises the local road network that forms an east west connection between Brattleby and Sturton by Stow. This is a local 'node' where the minor road network crosses a local tributary of the River Till and gives a subtle grain to the landscape where the roadside hedgerows and riparian vegetation create a small level of visual containment.

Importance of View: This is part of the local footpath network at a location where the distribution of public rights of way (PRoW) is limited giving a reliance on the local lanes for informal recreation. This being an eastwest road connection at a bridge crossing which is otherwise devoid of a range of features raises the level of importance of the view.

Number of Receptors: This location captures a limited range of receptors and is primarily a draw for local residents using the road network to travel east west by car. The location is unlikely to capture a high number of visitors from a wider area as there is little opportunity to park on the narrow lanes and walk from here. This is not a recognised travel destination in the district.

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Embedded mitigation would be taken into account at this

stage to include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

High Medium Medium Medium Medium Medium Medium to High Not Applicable





### Viewpoint VP4 - Thorpe Lane, Local Bridge

### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Thorpe Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the riparian vegetation bordering the River Till would provide some screening such that these activities would be confined to a narrower section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and east of Thorpe Lane.

### **Construction Access**

There would be no view of any construction access from this viewpoint

### **Cable Route Corridor**

Viewpoint is outside of the 0.5km study area and there would be no view of this route.

### **Substation**

This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.

### Operation (Year 1)

The foreground of the view would change from a large agricultural field to an area of panels with the previously planted hedgerow now established to provide some screening of the panels at the lower level. The second agricultural field beyond this would no longer be visible due to the intervening panels. In the middle distance to the centre, Thorpe Wood and Brattleby Thorns would still remain visible but above the panel areas. To the right-hand side of the view, Thorpe Lane would still be visible but in the context of panels where it leads towards Brattleby. The roadside hedgerows and verges would add softening and help mitigate views in that direction. The remainder of the horizon is made up of trees, farm buildings and telegraph poles in the middle and long distance and this would not change. The vertical elements in the view, including telegraph poles and associated cables would bring cumulative changes to the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Scattered tree belt

A proposed scattered tree belt is proposed to the western boundary of D22 either side of the existing hedgerow screening views of the more western extents of the Site whilst mitigating views to the east from 'The Lodge'.

### **Shelterbelt**

Close range views from Thorpe Lane are to be mitigated by the proposed 5m shelterbelt planting adjacent to the road and existing roadside hedgerow.

### **Existing hedges**

The existing riparian vegetation to the eastern boundary is to be retained, mitigating views from further east of the Site. Existing hedgerows surrounding fields D21 and D22 and to the north of field D19are to be enhanced with the addition of irregularly spaced hedgerow trees and infilled as necessary to create a layered well-treed landscape and further strengthening the existing field pattern in this area and creating some additional height across the local views.

### New hedges

The relatively small-scale field pattern in this area, broken up up existing ditches does not require additional hedge planting.

### **Grassland mixes**

Adjacent to existing hedgerows and proposed blocks of scattered trees, a tussock grass mix is proposed with a wildflower grass mix under the proposed panels. Areas of flower rich pollinator mix are proposed around other field boundaries as well as a 10m buffer around existing overhead power lines within field D18 and beyond.

### **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

Views to the north and west of the Site will be softened and screened at close-range through the shelterbelt planting and the enhancement of existing hedges which will be managed to a height of 5m in the middle distance. These augmented hedgerows will provide a series of good quality field boundaries both formally strengthening the existing and the historical field pattern and creating a multi-layered landscape. Views towards the longer distance (where hedgerows to not block these) will be of a layered, well treed landscape with a backdrop of some wooded vegetation in places on the horizon. Both new and existing vegetation will have established and begun to mature, creating a much stronger structure to the landscape and reducing the exposed feel of the area whilst retaining its overall character.

Open views across the non-wooded farmland will be retained to the east and south with enhanced tree cover to the north and west.

**Overall,** in terms of mitigation for the Cottam 1 South Site, initiatives could look to enhance the river systems and their floodplains for their ecological importance and contribution to biodiversity. The aim is to protect belts of waterside trees and riparian habitats to distinguish watercourses. The planting of trees and replacing lost hedgerows in flood plains to improve landscape character and attenuate flood flows is also promoted.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to take on the following rates:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

### Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain longterm improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



		Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation.	Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	
Magnitude	Medium	High	Medium	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor-Moderate <b>Not Significant</b>



Viewpoint VF	int VP4 - Thorpe Lane, Local Bridge			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint 4 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. Viewpoint 4 at Local Bridge in Thorpe Lane, is located approximately 1.6km to the closest Cumulative Development West Burton, however due to intervening field hedgerows and the vegetation bordering Tillbridge Lane in the distance, it is anticipated there would be no cumulative visual effects.		
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



### **Viewpoint VP5 - TLFe/31/2**

### **Viewpoint Baseline:**

The view is located on the PRoW, bridleway TLFe/31/2, looking north with the southern extent of the Cottam 1 South Site in the foreground.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying, flat arable landscape within the wider context of a broad vale, which adds to the sense of scale of this view. The land use is mainly productive arable farmland with many of the large fields under single crop. There is deciduous woodland including Thorpe Wood that forms a distinctive 'zig-zag' shape in the landscape along with the other occasional geometric blocks such as Cammeringham Low Covert and Brattleby Gorse. These woodlands combine to form a strong feature on the horizon and a feeling of enclosure due to their localized concentration. In terms of man-made elements, there are occasional farmsteads including The Grange that is just visible on the horizon (left of view) in the context of Thorpe Wood. This built form also includes the Grade II listed Brattleby Hall (List Entry:1063335). The tall hedgerow to the west of the bridleway also gives a sense of visual containment to this location. The hedgerows separating fields D16 from D18 and D19 stand tall and are a strong feature and the bridleway is also a prominent feature that has clear and direct view into fields D18 and D19. The vegetation is well managed providing a distinctive, but with a safe feel to the environment.

<u>Subjective:</u> The viewpoint depicts a large-scale, flat, open landscape, being exposed at close-range and in the mid distance due to the absence of hedgerows. In terms of variety, the combination of landscape features includes farm buildings, deciduous woodland, tall hedgerows, occasional hedgerow trees and arable fields that present a simple, well-balanced composition, but the increased field sizes add some discordancy. In terms of texture and colour, this is an intensively managed land use that is mainly muted.

<u>Overall:</u> The view is influenced by the open arable fields and the woodlands on the horizon that form a significant component and add balance to the landscape. The location offers some intimacy despite the close proximity to the residential property (The Lodge) to the south. There is a gap between the woodland on the horizon that extends the view towards the distant ridge line where the Scampton Airfield is just visible. The overall experience is interesting and very pleasant, with some depth to views and strong contrasting features.

### **Receptors:**

This viewpoint is representative of views available to PRoW users along the bridleway TFLe/31/2. This section of the bridleway leads from Thorpe Lane in the south to meet with Ingham Road in the north and is used for walkers, horse riders and occasional vehicle traffic.

### **Description of View:**

The foreground of the view comprises a large flat agricultural field with no hedgerow, two further agricultural fields are visible beyond this. In the middle distance, to the left there is a tall hedge bordering the bridleway. To the right-hand side of the view there are woodlands comprising Thorpe Wood and Brattleby Thorns visible amongst hedgerows and hedgerow trees and then a conifer hedgerow to the garden of the residential property (The Lodge). The remainder of the horizon is made up of woodlands at Cammeringham, trees, farm buildings in the middle and long distance. There are some vertical elements in the view, including telegraph poles and associated cables in the distance, but these are very minor elements in the context of the wider landscape and the dark wooded backdrop.





### **Receptor susceptibility to change**

In terms of forces for change for VP5, the main sensitivity is focused on the ancient enclosures that has been weakened by modern agricultural practices. The settlement pattern that defines the contrast between the small compact villages and larger market towns remains largely intact, but their landscape settings are risk of demise from expansion and development.

Overall, the susceptibility for VP5 is conditioned by string of historic settlements that are aligned approximately north to south and the Trent floodplain where there are surviving ancient enclosures characterised by small field sizes. The mixed farming heritage is also fundamental in retaining landscape character and should be managed to ensure the area continues to reflect its long history of agricultural land use. The relevant characteristics of the landscape therefore have a high susceptibility to change without undue adverse effects given there is scope to protect the character and diversity of the farming heritage of the area despite the erosion of traditional character and ecosystems through post-war agricultural intensification.

High

### Value of view

<u>Scenic:</u> The network of footpaths and bridleways offer a sequence of views to the setting of settlements that also include views towards their outlying woodland blocks which have been traditionally associated with them such as Thorpe Wood and Thorpe le Fallows.

<u>Cultural:</u> Some of the villages have a broad landscape setting which encompasses the minor roads. Where the footpath network links to these minor roads and the intersection captures views toward the settlement.

<u>Natural</u>: The management of hedgerows (and hedgerow trees) on the margins of villages and lining footpaths and bridleways is important to help retain the characteristic sense of enclosure and contrast with open areas. The hedgerow to the west of bridleway TLFe/31/2 offers scope for management.

<u>Recreation and Enjoyment:</u> Recreation is provided by the numerous local lanes and public rights of way, especially where the networks offer scope for circular routes or provide north south links between the east west minor roads. Bridleway TLFe/31/2 provides a strategic north south link between two east-west minor roads.

<u>Local Distinctiveness and Sense of Place:</u> Some views from the footpaths and bridleways offer long westward views to the power stations on the River Trent, and eastward views to the scarp face of Lincoln 'Cliff'. Bridleway TLFe/31/2 offers some views towards the limestone capped scarp slope.

<u>Health and Wellbeing:</u> The landscape feels exposed in parts, but the combination of bends in local lanes and blocks of woodlands provide some enclosure. This landscape pattern is important in invigorating the senses of well-being and matters of health. Bridleway TLFe/31/2 provides an opportunity to experience this enclosure from woodland blocks.

<u>Important Spatial Function:</u> Roads and minor farm tracks are bordered by wide verges and hedgerows and this contributes to their function in providing an open setting to villages. Access for recreation is an important factor in these locations and bridleway TLFe/31/2 provides access to a minor farm track.

**Overall**, the value of Viewpoint VP05 is shaped by the importance of Bridleway TFLe/31/2 that offers a sequence of views at both close range towards the setting of settlements and their outlying woodland blocks which have been traditionally associated with them such as Thorpe Wood and Thorpe le Fallows. Long range, eastward views towards the limestone capped scarp slope are also important. Medium

### Sensitivity

Range of Features: The location comprises the local road network that forms an east west connection between Brattleby and Sturton by Stow. This is a location where the minor road network forms a junction with the bridleway network. The viewpoint depicts a large-scale, flat, open landscape, being exposed at close-range and in the mid distance due to the absence of hedgerows and therefore displays few features of interest.

Importance of View: This is part of the local bridleway network at a location where the distribution of bridleways are limited giving a reliance on the local lanes for riding. This being a north south bridleway connection in a landscape which is otherwise devoid of a range of features footpath raises the level of importance of the view.

Number of Receptors: This location captures a limited range of receptors and is primarily a draw for local riders using the bridleway network to travel north south. The location is unlikely to capture a high number of riders from a wider area as there is little opportunity to park on the narrow lanes and ride from here. This is not a recognised destination for riding in the district.

Medium to High

### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Not Applicable





### **Viewpoint VP5 - TLFe/31/2**

Construction

### Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would not be screened due to the lack of foreground hedgerow bordering the Site/Sites. During the latter part of the construction stage, views would become available of the elevated activities also, but the tall hedgerow to the west of the bridleway would provide some screening

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting of new foreground hedgerows

such that these activities would be confined

to a narrower section of the view.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south of Thorpe Lane.

### **Construction Access**

There would be no view of any construction access from this viewpoint.

### **Cable Route Corridor**

Viewpoint is outside of the 0.5km study area and there would be no view of this route.

### **Substation**

### Operation (Year 1)

The foreground of the view would change from a large agricultural field to an area of panels. The two further agricultural fields beyond this would no longer be visible due to the intervening panels. Views of the tall hedge bordering the bridleway would remain as well as the views of Thorpe Wood and Brattleby Thorns, but these would now be visible above the panels. The conifer hedgerow to the garden of the residential property (The Lodge) would remain. The woodlands at Cammeringham, trees and farm buildings would remain in the view, but the panels would obscure the lower levels. The vertical elements in the view, including telegraph poles and associated cables would be obscured by the panels.

The Effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Scattered tree belt

A triangular shaped scattered tree belt is proposed to the southeastern corner of field D16 to the east of the overhead power cables and adjacent to the PRoW TLFe/31/2 at this viewpoint. Another block lies to the west of field D16 creating scattered blocks throughout the Site.

### Existing hedges

There is a good quality hedge adjacent to the road at this viewpoint looking north with a low over-managed hedgerow to the south creating an exposed landscape to the south. An existing hedge to the west of this PRoW heading north is to be enhanced with irregularly spaced native hedgerow trees and allowed to grow out to 5m creating some additional landscape features and helping to screen views from the PRoW and 'The Grange'. An existing hedgerow to the north of field D19 will also be enhanced breaking up the views to the north.

### New hedges

A new hedgerow is proposed to the eastern boundary of the PRoW as it heads north to 'The Grange' helping to enclose this PRoW, create an intimate experience and further enhance the varied experience of the route as well as to mitigate views of panels and overhead cables to the east and from Grange Farm.

A new hedgerow with hedgerow trees to the south of field D16 will run west/east joining the southern boundary of field D14 which abuts the war memorial Site. This will mitigate views from directly south as well as softening views when looking northwest from the PRoW, The Lodge and the road.

### Successional scrub planting.

To the west of the proposed block of scattered trees and beneath the existing power lines, a strip of successional scrub will create layering to the proposed woodland edge and create a low maintenance strip.

### Grassland mixes

A tussock mix is proposed to line the existing and proposed hedgerows with a tall herb mix 10m either side of the existing ditch line to the

### **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

Views to the northwest and northeast of the Site will be softened and screened at close-range through the planting of a block of scattered trees as well as new and enhanced hedgerows. In the middle distance, new and augmented hedgerows will provide a series of good quality field boundaries both formally strengthening the existing and historical field pattern and creating a multi-layered landscape towards Thorpe Wood and Brattleby Gorse. Views towards the longer distance, (where foreground vegetation does not block these), will be of a layered, well treed landscape with a backdrop of wooded vegetation in places on the horizon. Both new and existing vegetation will have established and begun to mature, creating a strong structure to the landscape, and reducing the exposed feel of the area whilst retaining its overall character. Views to the south of the Site will remain more open and exposed.

**Overall**, in terms of mitigation for the Cottam 1 South Site, the aim should be to plan new woodland in the most suitable locations. This may include in and around settlements, where woodland would help integrate new development into the landscape and in more intimate low-lying areas, where woodland would help create a mixed pattern of land use. Consideration should also be given to the management of existing trees and woodland, enhancing biodiversity value and age structure through new planting and the creation of woodland edge habitats. An increase in grassland reversion should also be encouraged, increasing the occurrence of semi-natural habitats.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to take on the following rates:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

### Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain longterm improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



	This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	western boundary of field D16. A flower rich pollinator mix is proposed under the existing power lines to the northeast of this viewpoint.  Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15	
Magnitude	Medium	High	Medium	Very Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Moderate – Major <b>Significant</b>	Major – Moderate <b>Not Significant</b>	Minor – Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint VI	Viewpoint VP5 - TLFe/31/2			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint 5 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. Viewpoint 5 at PRoW TLFe/31/2, is located approximately 1.5km from the closest Cumulative Development West Burton Site, however views to the development is limited by intervening field hedgerows and the vegetation bordering Tillbridge Lane in the distance.		
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



### **Viewpoint VP6 - Thorpe Lane**

### **Viewpoint Baseline:**

The view is located just off Thorpe Lane at the site of the Thorpe Lane Medieval Settlement (List Entry:101698), looking north with the southern extent of the Cottam 1 South Site in the foreground.

Objective: The viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying, flat arable landscape within the wider context of the broad vale, which adds to the sense of scale of this view. The wider land use is mainly productive arable, but the immediate context of the view is mainly in use as pasture and the remains of the medieval village survive well at this location. The remains include a series of substantial earthworks and linear ponds adjacent to Thorpe Road that are also part of the group remains. In terms of man-made elements, the war memorial to the west (left of view), and near the centre of this settlement of Thorpe le Fallows, marks the site of the former medieval church. Other built influences include the listed Thorpe le Fallows Farmhouse (List Entry Number: 1308921) which is a c. 1830 cream brick building with a hipped tiled roof, located to the south. This is a small hamlet including a collection of other properties including Westop Cottages to the southwest (west of view) and Clandon House to the southeast (right of view).

<u>Subjective:</u> The viewpoint depicts large-scale, slightly undulating landscape where the settlement of Thorpe le Fallows is located at a slightly higher elevation (approximately 10m AOD) as an almost localized plateau in the context of the wider lower-lying areas. This localize plateau gives rise to slightly less visibility towards the south and as a result the farmstead (The Grange) is only just visible to the northwest (right of view). Due to the localized landform, the skyline breaks the view within close context at this location. In terms of variety, the combination of landscape features includes farm buildings, deciduous woodland, tall hedgerows, occasional hedgerow trees, tree groups and pasture that presents an intimate quality to the foreground of the view with some enclosure created by the hedgerows. In terms of texture and colour, the landscape is managed and there are splashes of colour created by the surrounding buildings and variety of vegetation cover.

Overall: The view is influenced by the surviving features of the medieval village in the context of this localized plateau that adds a notable 'sense of place' to this location. This is a comfortable environment with a pleasant and interesting outlook to the north from the edge of the settlement. The overall experience is appealing, enhanced by the historic context where tranquility is a main feature of this view.

### **Receptors:**

The viewpoint is representative of views available to residents of Clandon House and Westop Cottages, and motorists using Thorpe Lane. This section of the lane leads from the settlement of Sturton by Stow in the west towards Brattleby in the east.

### **Description of View:**

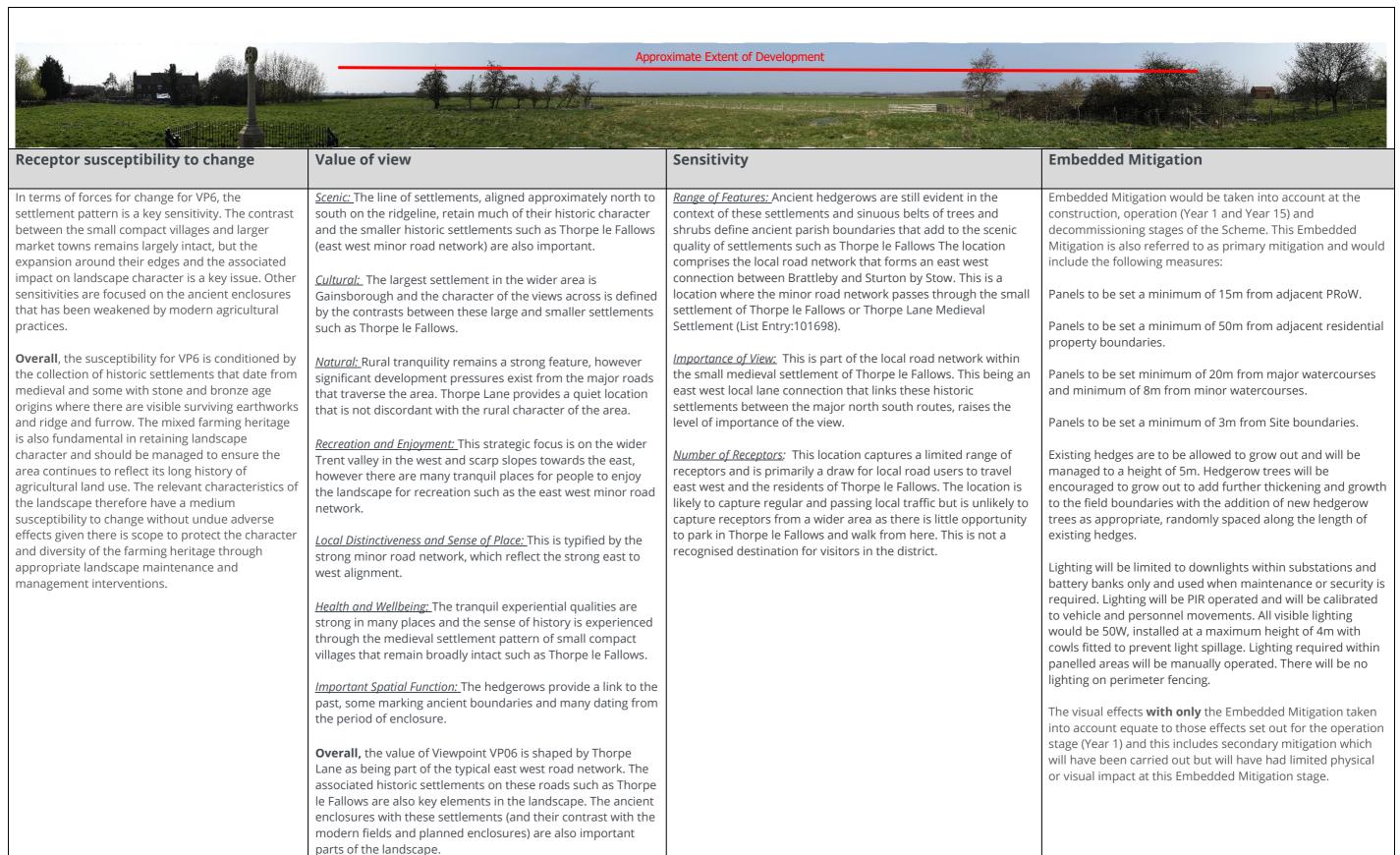
The foreground of the view comprises a large flat agricultural field defined by a post and wire fence and a further agricultural field is visible beyond this. In the middle distance, to the left there is riparian vegetation cover bordering the River Till visible amongst hedgerows and hedgerow trees. To the right-hand side of the view there are woodlands comprising Thorpe Wood and Brattleby Thorns and then the garden of the residential property (Clandon House). The remainder of the horizon is made up of woodlands at Coates, trees, hedgerows, and farm buildings in the middle and long distance. There are some vertical elements in the view, including telegraph poles and associated cables in the distance, but these are very minor elements in the context of the wider landscape and the dark wooded backdrop.

Not Applicable



High

Medium



Medium to High





### **Viewpoint VP6 - Thorpe Lane**

### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering the Site/Sites. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the hedgerows to the bordering field systems would provide some screening such that these activities would be confined to a narrower section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the pasture and arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south of Thorpe Lane

### **Construction Access**

There would be no view of any construction access from this viewpoint.

### **Cable Route Corridor**

Viewpoint is outside of the 0.5km study area and there would be no view of this route.

### **Operation (Year 1)**

The foreground of the view would change from a large agricultural field into an area of panels and the further agricultural field beyond this would no longer be visible. The riparian vegetation cover bordering the River Till would visible but above the panel areas along with Thorpe Wood and Brattleby Thorns. The remainder of the horizon would just be visible above the panels to include the woodlands at Coates, trees, hedgerows but the farm buildings may disappear from view. The vertical elements, including telegraph poles and associated cables would be hidden from view by the panels.

The Effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Scattered tree belt

To the north of fields D11 and D13 in the mid distance, blocks of scattered trees are to line the northern boundary of the Site at this point, reinforcing the field patterns and offsetting Scheme20m from the adjacent IDB waterway.

### <u>Shelterbelt</u>

To the southern boundary between D12 and D14, a shelterbelt is proposed to the west of the existing vegetation, screening the internal access road to create a strong buffer between the scheduled monument and dwellings along Thorpe Road and the proposed Site/Sites to the west. This shelterbelt continues along the southern boundary adjacent to the road to Thorpe Bridge, mitigating views north and northeast from the road.

### Existing hedges

An existing hedgerow to the west of 'The Grange' is to be augmented with additional hedgerow trees and infilled as necessary.

### New hedges

A new hedgerow with irregularly spaced hedgerow trees is proposed to the southern boundary of field D14 adjacent to the War memorial Site where some limited vegetation exists. This viewpoint is in close range to the Site and new hedging with trees will mitigate views directly to the north.

### **Grassland mixes**

### **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

Views directly north into the Site will be softened and screened at close-range through planting the new hedgerow which will be managed to a height of 5m with additional hedgerow trees. In the middle distance, new and augmented hedgerows will provide a series of good quality field boundaries both formally by strengthening the existing and historical field pattern and by creating a multi-layered landscape. Views towards the longer distance (where hedgerows do not block these), will be of a layered, well treed landscape with a backdrop of wooded vegetation in places on the horizon. Both new and existing vegetation will have established and begun to mature creating a strong structure to the landscape and reducing the exposed feel of the area whilst retaining its overall character.

**Overall,** in terms of mitigation for the Cottam 1 South Site, the aim should be to plan new woodland in the most suitable locations. This may include in and around settlements, where woodland would help integrate new development into the landscape and in more intimate low-lying areas, where woodland would help create a mixed pattern of land use. Consideration should also be given to the management of existing trees and woodland, enhancing biodiversity value and age structure through new planting and the creation of woodland edge habitats. An increase in grassland reversion should also be encouraged, increasing the occurrence of semi-natural habitats.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.

### Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long-term landscape and visual effects of this mitigation.



	Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	A minimum of 50m width of open grassland to the southern part of the Site at this point will comprise a tussock seed mix to continue the open grassland of the mediaeval/war memorial site. This tussock mix is to extend to the western boundary of D14 with a flower rich pollinator mix to the northern boundary adjacent to existing hedges and ditch.  To the east of D14, a tall herb mix is to be planted 10m either side of the existing ditch line to create an open and varied habitat with views of the waterway.  Adverse effects:  Panels and structures across the landscape Increased hard standing areas Increased traffic locally Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Shrubs: 0.9m at Year 1 and 5m at Year 15.	
Magnitude	Medium	High	Medium	Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Major - Moderate <b>Significant</b>	Minor-Moderate Not Significant	Minor-Moderate <b>Not Significant</b>



Viewpoint VI	P6 – Thorpe Lane	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	In Summary	In Summary
	There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, there is no combination visual effects are anticipated.	The Cumulative Effects upon viewpoint 6 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. The closest Development to Viewpoint 6 is West Burton Site, located approximately 1.6km to the south, however views to the development are limited by intervening field hedgerows and the vegetation bordering Tillbridge Lane in the distance, therefore no cumulative visual effects are anticipated.
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area
		Aesthetic Aspects of the Landscape  Refer to Figure <b>8.15.2.1</b> [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape.  These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features
		are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term
Significance of Effect	No Change	Decommissioning: Neutral & Short Term  Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant
		Decommissioning: Negligible <b>Not Significant</b> Decommissioning: Negligible <b>Not Significant</b>



### **Viewpoint VP7 - Thorpe Bridge TLFe/32/1**

### **Viewpoint Baseline:**

The view is located on Thorpe Lane at Thorpe Bridge at the junction with footpath (TLFe/32/1) where the lane crosses the River Till, looking northeast towards the southern extent of the Cottam 1 Site/Sites.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying almost flat landscape within the wider context of a broad vale, which is conspicuous in this view. The land use is mainly productive arable farmland with many of the large fields under single crop. There is some deciduous woodland including a very strong shelterbelt to the south of Thorpe Lane and the east of the bridge (right of view) that is a very distinctive feature in the landscape. The lack of a hedgerow field boundary to the north side of the lane allows direct views across the open fields. The pattern of drainage is a key feature at this location and the River Till is notable to the west (left of the view) as it forms a meandering course along the western edge of the Site/Sites. This watercourse crosses beneath the lane at Thorpe Bridge (there is a local stopping point or 'pull-in' off the lane to capture views across to the settlement of Sturton by Stow) and then takes a meandering course towards the northeast and follows an irregular alignment to then pass beneath Ingham Road at Squire's Bridge. The watercourse winds through the landscape and is hardly discernable except for a minor tracing of alder and willow trees on the far horizon. In terms of man-made elements, Thorpe Lane to the east (right of view) in the foreground is the main feature and the concrete bridge structure and its metal balustrade railing to each side are typical of the built elements of this landscape.

<u>Subjective</u>: The viewpoint depicts an exposed, large-scale landscape, that is extensive in nature due to the absence of hedgerows. In terms of variety, although the landscape is uniform and mostly consistent, it lacks interest other than the strong tree cover to the south side of Thorpe Lane that has a strong vertical influence and lends a distinctive 'sense of place' to this location. The views also extend as far as the settlement of Sturton by Stow where the chunky church tower is a distinctive feature on the horizon and the isolated buildings group at Fleets Cottages is also a feature in the landscape. Woodlands such as Thorpe Wood are also just evident on the distance horizon. In terms of texture and colour, the fields are under single crop and this gives a monochrome appearance to the view, and an overriding impression of being an ordinary landscape.

<u>Overall:</u> The viewpoint is influenced by the presence of the River Till that passes beneath Thorpe Bridge at this local stopping point off the lane. The watercourse is distinguished by the presence of rusty pastures and minor concentrations of riparian tree cover on the distant skyline in what is an otherwise open and featureless landscape. There are intensive levels of management within this arable farmland that add some decline to the natural qualities of the view. The overall impression are distinctive views over a simple calm landscape at a local stopping point on Thorpe Lane.

### Receptors

This viewpoint is representative of views available to users travelling on Thorpe Lane. This section of the lane leads from Sturton by Stow in the west towards Brattleby in the east and is host to a variety of users including cyclists, horse riders and walkers.

### **Description of View:**

The foreground of the view comprises a large flat agricultural field defined by a recently planted hedgerow and a further agricultural field is visible beyond this. In the middle distance, to the left there is riparian vegetation cover bordering the River Till visible amongst hedgerows and hedgerow trees. To the right-hand side of the view there are woodlands comprising Thorpe Wood and Brattleby Thorns. The remainder of the horizon is made up of woodlands at Coates, trees, hedgerows, and farm buildings in the middle and long distance. There are some vertical elements in the view, including telegraph poles and associated cables in the distance, but these are very minor elements in the context of the wider landscape and the dark wooded backdrop.





## In terms of forces for change for VP7, there is pressure for built development in villages within

**Receptor susceptibility to change** 

pressure for built development in villages within commuting distance of Lincoln and some of the most sensitive parts of the landscape are the minor steams and bridge crossings where the east west road cross the landscape. The associated riparian vegetation with these locations is also a sensitive feature.

Overall, the susceptibility for VP7 is conditioned by the need to retain buffer zones along rivers and streams to enhance their nature conservation value and reduce fertilizer/pesticide run off from arable land. However, there is an opportunity for new tree/scrub planting (goat willow, hawthorn, alder and alder buckthorn) along these rivers, streams and ditches to increase their visual presence in the landscape. The relevant characteristics of the landscape therefore have a high susceptibility to change without undue adverse effects given there is scope to restore/enhance/create river habitats and river margins including some naturalisation of some of the watercourses.

High

### Value of view

Medium

<u>Scenic:</u> The river flood plains and watercourses such as the River Till, and their associated vegetation and grazing marsh and the landscape character they provide are important scenic features.

<u>Cultural</u>: The historic crossings of the River Trent is a significant feature in contrast to the minor presence of the River Till as it meanders slowly across its flood plain. The crossings of the River Till with the local road network are important to local landscape character.

<u>Natural:</u> Very little semi-natural habitat remains across the area, apart from habitat associated with the River Till and its tributaries, which provides a strong feature running through the landscape that can be experienced at these local bridge crossings.

<u>Recreation and Enjoyment:</u> The River Till and its associated flood plains play an important role in the area for their recreational importance especially where footpaths and bridleways such as TLFe/32/1 follow their course.

<u>Local Distinctiveness and Sense of Place:</u> A simple palette of low-lying terrain gives visual unity and a strong sense of identity to the landscape at local bridge crossings.

<u>Health and Wellbeing:</u> Access within and connecting to the river corridors and their flood plains are important for biodiversity, geodiversity, recreation, and health benefits.

*Important Spatial Function:* The landform is low-lying with smooth low ridges that divide the shallow broad river valleys (vales) and their flood plains. The River Till is the key river valley that provides the spatial function to bridleway TLFe/32/1 at this location.

**Overall**, the value of Viewpoint VP07 is shaped by the presence of the River Till and its network of tributaries, valleys, corridors, and flood plains that are key features in the landscape. Where the footpath and bridleway network (such as TFLe/32/1) follow these river corridors and meet with the local road network this adds to the importance of the views across the area. The crossings of the River Till with the local road network are key features to local landscape character and important in framing views across the area.

### Sensitivity

Range of Features: The location comprises the local road network that forms an east west connection between Brattleby and Sturton by Stow. This is a local 'node' where the minor road network crosses the River Till and gives a distinctive grain to the landscape where the roadside hedgerows, mature trees and riparian vegetation create a small level of visual containment and interest at this location.

Importance of View: This is part of the local footpath network at a location where the distribution of public rights of way (PRoW) is limited giving a reliance on the local lanes for informal recreation. This being an east-west road connection at a bridge crossing which is otherwise devoid of a range of features raises the level of importance of the view.

Number of Receptors: This location captures a limited range of receptors and is primarily a draw for local residents using the road network to travel east west by car. The location is likely to capture some visitors from a wider area as there is opportunity to park in the lay by and walk from here. This is not a recognised travel destination in the district, but it does provide an interesting destination for walking the course of the River Till.

Medium to High

### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

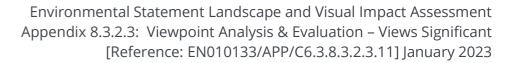
Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Not Applicable





### **Viewpoint VP7 - Thorpe Bridge TLFe/32/1**

### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be visible due to the absence of foreground hedgerow bordering the Site/Sites. During the latter part of the construction stage, views would become available of the elevated activities, and the lack of hedgerows to the bordering field systems would give rise to open visibility such that these activities would be confined to a wide section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south of Thorpe Lane and to the west of this location.

### **Construction Access**

All throughout the construction phase the viewpoint will be affected due to Thorpe Lane having a point of access into the Cottam 1 South Site through field D10.

### **Cable Route Corridor**

Viewpoint is outside of the 0.5km study area and there would be no view of this route.

### Operation (Year 1)

The foreground of the view would change from a large agricultural field to an area of panels with the previously planted hedgerow now established to provide some screening at the lower level. The further agricultural field beyond this would no longer be visible due to the intervening panels. In the middle distance, the riparian vegetation cover bordering the River Till would remain visible but above the panels along with Thorpe Wood and Brattleby Thorns. The remainder of the horizon comprising the woodlands at Coates, trees and hedgerows would remain visible above the panels, but the farm buildings may disappear from view. The vertical elements in the view, including telegraph poles and associated cables would bring very minor cumulative changes to the view.

The Effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Scattered tree belt

A strong belt of scattered trees is proposed to the eastern boundary of the River Till, set adjacent to but a minimum of 20m from the watercourse. This belt will significantly enhance this open and exposed area whilst creating a strong ecological corridor and mitigating views into the Site from Thorpe Road and views from the west. This belt is to run north from Thorpe Road to the north of field D10 where it joins existing vegetation at this point. The tree belt will break to cross the river and will then follow along its western edge in field D9 creating an overall belt of trees of some 1000m running north/south.

### Shelterhelt

A shelterbelt is proposed to the north of Thorpe Road to mitigate views from the road and augment the existing roadside vegetation beyond a site access road adjacent to the bridge.

A further block of shelterbelt planting is proposed to the southwestern extent of the new tree belt to mitigate views from the west around this Site entrance.

### Existing hedges

Existing hedgerows around D11,12 and 14 are to be enhanced with infilling as necessary and the addition of hedgerow trees spaced intermittently along their length to strengthen the overall field pattern and create some visual interest.

### New hedges

A new hedge is proposed to the east of an existing ditch which runs north/south between D10 and D12 further breaking up the very open and barren landscape at this point.

### Grassland mixes

A minimum 10m buffer either side of the existing waterways is to be seeded with a tall herb mix to create visual interest and ecological benefits around these waterways.

### **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

This view will become significantly more enclosed creating a more varied and interesting route along this section of the Thorpe Lane. The close-range views to the north will be mitigated by a strong shelterbelt screening the solar panels, whilst scattered tree planting in a belt along the River Till will add considerable structure to the landscape. By year 15, this vegetation will be well established with hedgerows maintained to 5m and intermittent tree cover creating a more diverse landscape across the longer distance views.

**Overall**, in terms of mitigation for the Cottam 1 South SIte, due to the shift away from mixed farming, this has had an impact on local character and also in regulating water quality. The aim should be to protect and enhance belts of waterside trees and riparian habitats to distinguish watercourses and create buffer. The planting of trees and replacing lost hedgerows in flood plains to improve landscape character and attenuate flood flows should also be encouraged.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.

Shrubs: 0.9m at Year 1 and 5m at Year 15.

### Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



	Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	A tussock mix is proposed to the base of existing and proposed hedgerows along Thorpe Road, linking up with a block of tussock mix north of the War Memorial Site.  Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation		
Magnitude	Medium	High	Medium	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Significance of Effect	Moderate - Major <b>Significant</b>	Major - Moderate <b>Significant</b>	Moderate - Major <b>Significant</b>	Minor-Moderate <b>Not Significant</b>



Viewpoint VF	Viewpoint VP7 - Thorpe Bridge TLFe/32/1			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore,	In Summary  The Cumulative Effects upon viewpoint 7 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. The closest Cumulative Development to viewpoint 7 is Tillbridge Solar located approximately 6km to the northeast and it is anticipated there would be no cumulative visual effects due to proximity.		
	there no in combination visual effects are anticipated.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area. There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation Very Low Operation (Year 15): with Embedded and Secondary Mitigation: Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



### Viewpoint VP10 - Stur/73/1

### **Viewpoint Baseline:**

The view is located on PROW, footpath (Stur/3/1) looking northeast with the Cottam 1 South Site in the immediate foreground.

<u>Objective:</u> This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying almost flat landscape within the wider context of a broad vale, which is conspicuous in this view. There are also views across this vale towards the Limestone Scarps and Dipslopes Character Area 6a, where the landform rises sharply to capture the ridgeline at Cammeringham and Brattleby. The landform also rises gently in the west (left of view) towards the settlement edge of Sturton by Stow (rising from 15m AOD to 20m AOD). The land use is predominantly arable with some deciduous woodlands and shelterbelts in the far distance, such as those to the east of Fleets Lane at Brattleby Thorns and Cammeringham. In terms of man-made features, there is very little built influence and settlement is very sparse comprising scattered farmsteads at Furze Hill, Lower Furze Hill and The Grange. There are also isolated dwellings known as Fleets Cottages which stand out as a strong built influence in the foreground of the view. Fleets Lane is also a prominent man-made influence in the view.

<u>Subjective:</u> The view depicts a large-scale landscape, that is mostly exposed but with some areas of enclosure due the strong hedgerow network with mixed species comprising spindle and hawthorn. There are far-reaching views toward the limestone scarp slope, although views towards the Lincoln Cliff and the Lincoln Minster are less evident due to the relatively lower elevation at this point (approximately 10m AOD). There are however direct views towards the limestone capped ridgeline at Cammeringham and Brattleby where the woodland cover is a strong feature on the horizon. In terms of variety, the combination of landscape features includes farmsteads, deciduous and coniferous woodland, strong hedgerows, poplar shelterbelts and hedgerow trees that present a varied and harmonious composition. In terms of texture, the arable fields are highly managed with a muted colour combination giving an impression of an ordinary landscape, but this is balanced in terms of interest by the far reaching, views towards the limestone scarp slope at Cammeringham and Brattleby.

Overall: The view is influenced by the intensive arable landscape where the presence of hedgerows helps reduce the scale. This is a quiet location (even though it is in close proximity to Sturton by Stow) with a distinct absence of settlement or busy roads. The local road network passes across the landscape with some right-angled bends giving the opportunity to capture views towards the distant ridgeline. The viewpoint depicts a large-scale landscape that is divided by a strong hedgerow network at this location, which helps to decrease the sense of scale. This is a quiet spot and Fleets Lane is an attractive local lane with distinctive grass verges but is open in parts due to the lack of verge side hedgerows. The overall experience is a pleasant and invigorating comprising a view from a quiet location in close proximity to the settlement of Sturton by Stow.

### Receptors:

This viewpoint is representative of users of Fleets Lane and the footpath, PRoW (Stur/73/1). This is the section of the footpath that leads from the west at Sturton by Stow (from School Lane and Ashfield) where the footpath then joins with Fleets Road in the east.

### **Description of View:**

The foreground of the view comprises two large flat agricultural fields divided by the access track leading to Fleets Cottages with further agricultural fields that are visible beyond this. The collection of fields are defined by well-established hedgerows with no hedgerow trees. In the middle distance there is Fleets Cottages then to the left there is riparian vegetation cover bordering the River Till visible amongst hedgerows and hedgerow trees along with woodland at Coates. To the right-hand side of the view there are woodlands comprising Thorpe Wood and Brattleby Thorns. The remainder of the horizon is made up of woodlands at Brattleby and Cammeringham, trees, hedgerows, and farm buildings in the middle and long distance. There are some vertical elements in the view, including telegraph poles and associated cables in the distance, but these are very minor elements in the context of the wider landscape and the dark wooded backdrop.





# Receptor susceptibility to change In terms of forces for change for VP10, the

landscape has a strong rural character, but tranquility levels are being disturbed by development pressures from the larger scale settlements and major routes across the area. Tranquility is however associated with the winding lanes and landscape-scale projects such as the Trent Vale Landscape Partnership which can help by offering increased recreational and educational opportunities within these areas.

**Overall,** the susceptibility for VP10 is conditioned by the limited network of footpaths and bridleways and the availability of the rural roads and minor tracks for extended access. The relevant characteristics therefore have medium susceptibility to change without undue adverse effects. There is however scope to increase recreation opportunities including where there are natural features and historical elements to draw interest from residents and tourists.

### Value of view

<u>Scenic:</u> The major roads and the network of minor lanes within the Unwooded Vales Character Area 4a as strong functional feature running through the landscape, which contribute strongly to scenic factors. Fleets Lane is a key part of this network.

<u>Cultural:</u> This network of minor lanes links supports the linking of the string of small, nucleated settlements along the B1241 such as Sturton by Stow, Stow, Normanby by Stow and Willingham by Stow. Views from these minor lanes towards the landscape setting of the settlements provide the cultural context to views from roads such as Fleets Lane.

<u>Natural:</u> These minor lanes provide attractive destinations as narrow country lanes often with hedgerows on both sides or ditches that enhance the rural quality of the area.

<u>Recreation and Enjoyment:</u> The east west travel direction often links the older settlements moving in a more random pattern following minor roads. These roads gain access to smaller villages and are popular for recreation.

<u>Local Distinctiveness and Sense of Place</u>: This is a predominantly rural and sparsely settled area with small villages and dispersed farms linked by quiet lanes such as Fleets Lane that connect across the landscape to the wider strategic road network linking the cities of Nottingham and Lincoln.

<u>Health and Wellbeing:</u> The local roads (that gain access to smaller villages) are popular for recreation since they provide attractive destinations as narrow country lanes often with high levels of tranquility and isolation.

<u>Important Spatial Function:</u> The bypassing of original village changes the spatial function of the landscape these minor routes such as Fleets Lane play an important role.

**Overall**, the value of Viewpoint VP10 is shaped by the wide range of features which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes such as Fleets Lane that are often tranquil with wide grassed verges.

### Sensitivity

Range of Features: The location comprises the local road network that forms a north south axis between the prevailing east west pattern which connects between Brattleby and Sturton by Stow. This is a local 'node' where the minor road network crosses the River Till and gives a distinctive grain to the landscape where the roadside hedgerows, mature trees and riparian vegetation create a small level of visual containment and interest at this location.

Importance of View: This is part of the local road network that offers far-reaching views toward the limestone scarp slope, although views towards the Lincoln Cliff and the Lincoln Minster are less evident due to the relatively lower elevation at this point (approximately 10m AOD). There are however direct views towards the limestone capped ridgeline at Cammeringham and Brattleby where the woodland cover is a strong feature on the horizon, raising the importance of the view.

Number of Receptors: This location captures a limited range of receptors and is primarily a draw for local residents using the road network to travel north south by car. The location is unlikely to capture some visitors from a wider area as there is no opportunity to park and walk from here. This is not a recognised travel destination in the district.

### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Medium Medium

Medium

Not Applicable





### Viewpoint VP10 - Stur/73/1

### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of the foreground hedgerows bordering Fleets Lane. During the latter part of the construction stage, views would become available of the elevated activities, but the hedgerows bordering Fleets Lane and those within the bordering field systems would give some partial visibility such that these activities would be confined to a framed section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the west of Fleets Lane and to the south of this location.

### **Construction Access**

All throughout the construction phase the viewpoint will be affected due to Thorpe Lane having a point of access into the Cottam 1 South Site through field D10.

### **Cable Route Corridor**

### Operation (Year 1)

The foreground of the view would change from two large agricultural fields to two areas of panels. The further agricultural fields beyond this would no longer be visible due to the intervening panels. Fleets Cottages would still remain in the view but above the panels along with the riparian vegetation bordering the River Till and the woodland at Coates. Thorpe Wood and Brattleby Thorns would also remain in the view, but above the panels along with woodlands at Brattleby and Cammeringham. The vertical elements in the view, including telegraph poles and associated cables would be bring very minor cumulative changes to the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Scattered tree belt

A strong belt of scattered trees is proposed to the eastern boundary of the River Till, set adjacent to but a minimum of 20m from the watercourse. This belt will significantly enhance this open and exposed area whilst creating a strong ecological corridor and mitigating views into the Site from Thorpe Road and views from the west. This belt is to run north from Thorpe Road to the north of field D10 where it joins existing vegetation at this point.

The tree belt will break to cross the river and will then follow along its western edge in field D9 creating an overall belt of trees of some 1000m running north/south.

### Shelterbelt

A shelterbelt is proposed to the north of Thorpe Road to mitigate views from the road and augment the existing roadside vegetation beyond a site access road adjacent to the bridge.

A further block of shelterbelt planting is proposed to the southwestern extent of the new tree belt to mitigate views from the west around this Site entrance.

### Existing hedges

Existing hedgerows around D11,12 and 14 are to be enhanced with infilling as necessary and the addition of hedgerow trees spaced intermittently along their length to strengthen the overall field pattern and create some visual interest.

### New hedges

A new hedge is proposed to the east of an existing ditch which runs north/south between D10 and D12 further breaking up the very open and barren landscape at this point.

### Grassland mixes

A minimum 10m buffer either side of the existing waterways is to be seeded with a tall herb mix to create visual interest and ecological benefits around these waterways.

A tussock mix is proposed to the base of existing and proposed hedgerows along Thorpe Road, linking up with a block of tussock mix north of the War Memorial Site.

### **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

This view will become significantly more enclosed creating a more varied and interesting route along this section of the Fleets Lane. The close-range views to the north will be mitigated by a strong shelterbelt screening the proposed Scheme whilst scattered trees planting in a belt along the River Till will add considerable structure to the area. By year 15, this vegetation will be well established with hedgerows maintained to 5m and intermittent tree cover creating a more diverse landscape across the longer distance views

Overall, in terms of mitigation for the Cottam 1 South, Site due to the limited network of public rights of way (PRoW) across the area the aim is to enhance the river corridors and their flood plains for their recreational importance and the Trent is the main river providing a valuable link. The Trent Valley Way in particular, provides a long-distance route. The other notable river is the upper parts of the Witham of which the River Till is a tributary. The aims are to extend the non-road network, especially where it can link people to woodlands and river corridors. Trees and hedgerows also make an important contribution and improvements on approaches to villages could improve the identity of the local landscape for the benefit of recreation.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

### Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

Without Secondary Mitigation having been applied throughout the scheme, the only change to the views/landscape following decommissioning would be the existing hedgerows which will have been allowed to grow out and will have been managed to a height of 5m. It is assumed that these will be retained.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term



	Viewpoint is outside of the 0.5km study area and there would be no view of this route.  Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	A tussock mix will border existing hedgerows with flower rich pollinator mix to the southern aspects of hedgelines in fields D9 and surrounding D10.  Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	landscape and visual effects of this mitigation.
Magnitude	Medium	High	Medium	Very Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Moderate <b>Significant</b>	Moderate-Major <b>Significant</b>	Moderate <b>Significant</b>	Negligible <b>Not Significant</b>



Viewpoint VI	Viewpoint VP10 – Stur/73/1			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, there no in combination visual effects are anticipated.	In Summary The Cumulative Effects upon viewpoint 10 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. The closest Development to Viewpoint 10 is West Burton Solar Site, located approximately 2.5km to the southeast, and it is anticipated there would be no cumulative visual effects due to intervening field hedgerows and the vegetation bordering Tillbridge Lane.		
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area. There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



### **Viewpoint VP11 - TLFe/31/2**

### **Viewpoint Baseline:**

The view is located on PRoW, bridleway (TLFe/31/2) looking towards the southern extent of the Cottam 1 Site/Sites.

<u>Objective:</u> This viewpoint offers views over a low-lying, flat landscape where the wider context of a broad valley is almost evident due to the open nature of the view, and this helps to enhance the sense of scale. The viewpoint shows a typical arable landscape where there are some distant man-made influences such as the Trent power industry on the far horizon. There is limited woodland cover apart from Thorpe Wood plantation which is visible in the middle ground of the view as it extends into the skyline (left of view) and has a dominant influence. The tall hedgerow is visible on the west side of the bridleway (left of view). The bridleway then extends ahead to turn in a dog leg direction and eventually meet with Thorpe Lane.

<u>Subjective:</u> The viewpoint depicts a large-scale landscape scale with a more open location to the east due to the tall hedgerow enclosing the view to the west. In terms of variety, there is a combination of features such as hedgerows and woodland adding some complexity to the view. In terms of texture, the landscape is organised and well-managed and the colours are muted.

Overall: The view is ordinary and typical to the local character. The openness of the bridleway makes the environment unsettling. The overall environment is bland and unpleasant.

### Receptors:

This viewpoint is representative of views for walkers and horse riders using bridleway TLFe/31/2, which links Thorpe Lane and Thorpe le Fallows in the south to Ingham Road in the north.

This is a similar view to that provided by Viewpoint VP05, although at a location (approximately 650m) to the north.

### **Description of View:**

The foreground of the view comprises two large flat agricultural fields divided by the bridleway leading to Thorpe Lane, but further agricultural fields are not visible beyond this since this local collection of fields is defined by well-established hedgerows that curtail visibility. In the middle and long distance there is no visibility. To the right-hand side of the view, there is the hedgerow defining the bridleway and to the left-hand side of the view there is Thorpe Wood. The remainder of the horizon is made up of trees, hedgerows, and farm buildings at close range. There are some vertical elements in the view, including agricultural buildings at The Grange, telegraph poles and associated cables, but these are very minor elements in the context of the immediate landscape and the dark wooded backdrop.





### Receptor susceptibility to change

In terms of forces for change for VP11, the distinctive character of the settlements in the context of their associated woodlands are sensitive features of the landscape. The aims to promote new woodland planting as a component of the landscape are therefore important. The restoration of hedgerows should also be given priority to strengthen the field pattern and enhance linkages between these woodlands. The impact on the setting of village churches and the relationship with woodlands is also particularly important as these are distinctive local landmarks.

Overall, the susceptibility for VP11 is conditioned by several key forces for change that have the potential to shape the future of the landscape. These include the mitigation for agricultural intensification and farm amalgamation that is resulting in the loss or damage of many typical landscape features, including traditional patterns of field boundaries, remnants of ridge and furrow, and grasslands. The loss of grazing fields around the edges of villages is also leading to a more homogenous landscape. The relevant characteristics therefore have a high susceptibility to change without undue adverse effects.

### Value of view

<u>Scenic:</u> This location appeals to the visual senses where the public bridleway and Thorpe Wood combine to give a subtle grain to the landscape. The interruption at this bridleway provides a local point of interest and the opportunity to capture views that are framed by the woodland across the landscape to the higher landform fringing the Vales.

<u>Cultural:</u> The landscape shows evidence of historic settlement with farms and nucleated villages and small hamlets such as Thorpe le Fallows to the south.

Natural: The extensive expanses of semi-natural habitat, rivers, and streams are an important landscape feature such the River Till to the west and a tributary to the east, where their courses can be observed by tracing sinuous belts of riparian habit and riverside trees.

<u>Recreation and Enjoyment:</u> Whilst the landform of the Unwooded Vales Character Area 4a is typically low and subdued, rising landform often provides locations where glimpses of neighboring elevated land are often sufficient to add to the recreation and enjoyment of the area. Typically, these locations occur around Thorpe le Fallows and along Thorpe Lane and the bridleways that join them.

<u>Local Distinctiveness and Sense of Place:</u> The landscape has a 'strong sense of place' with major landform features flanking the lower lying areas creating a broad scale visual containment along the ridgeline to the east at Cammeringham, Ingham and Fillingham.

<u>Health and Wellbeing:</u> The Unwooded Vales Character Area 4a provides a very limited network of PRoW with a dependence on the more direct arterial routes that run east to west across the area linked by the north south bridleway network.

<u>Important Spatial Function:</u> Despite the low levels of woodland cover, the landscape benefits from high levels of visual containment with woodlands such as Thorpe Wood.

**Overall,** the value of Viewpoint VP011 is shaped by the interruption at the bridleway with Thorpe Wood, that provides a local point of interest and the opportunity to frame and truncate views across the landscape to higher landform fringing the Vales. These lower lying areas also support intact hedgerows and belts of riverside trees that truncate views and give a feeling of intimacy, enclosure and 'sense of place'.

### Sensitivity

Range of Features: The location comprises the public bridleway network that forms a north south connection between Thorpe Lane in the south that leads between Brattleby and Sturton by Stow and Ingham Road in the north. The viewpoint depicts a large-scale, flat, open landscape, being exposed at close-range but the presence of hedgerows and Thorpe Wood displays some features of interest.

Importance of View: This is part of the local bridleway network at a location where the distribution of bridleways are limited giving a reliance on the local lanes for riding. This being a north south bridleway connection in a landscape which is otherwise devoid of bridleway connections raises the level of importance of the view.

Number of Receptors: This location captures a limited range of receptors and is primarily a draw for local riders using the bridleway network to travel north south. The location is unlikely to capture a high number of riders from a wider area as there is little opportunity to park on the narrow lanes and ride from here. This is not a recognised destination for riding in the district.

### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

High Medium Medium Medium Medium Medium Medium Medium Medium Not Applicable





### **Viewpoint VP11 - TLFe/31/2**

### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic. noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be visible due to the absence of the foreground hedgerows bordering the Site/Sites. During the latter part of the construction stage, views would become available of the elevated activities, but the hedgerows within the bordering field systems would give some partial screening such that these activities would be confined to a filtered section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate northwest of this location.

### **Construction Access**

All throughout the construction stage the viewpoint will be affected due to Thorpe Lane having a point of access

### **Operation (Year 1)**

The foreground of the view would change from two large agricultural fields to two areas of panels. The further agricultural fields beyond this would no longer be visible due to the intervening panels. The hedgerow defining the bridleway would still remain a feature of the view along with Thorpe Wood. The vertical elements, including agricultural buildings at The Grange, telegraph poles and associated cables would bring very minor cumulative changes to the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A small area of scattered tree belt is proposed to the east of this viewpoint between the existing overhead power cables and an IDB drain. This will help to break up views to the east and create a small block of tall vegetation. Another block sits to the south of this PRoW towards Thorpe Road.

To the northwest of this viewpoint and bounding fields D11 and 13, a belt of trees is proposed adjacent to, but 10m south of the existing ditch. This belt will provide a strong east/west buffer providing height in this area and will help to screen the Scheme from views to the northeast on the PRoW and other views from the north.

#### Existing hedges

Existing hedges in and around the Site are to be enhanced to strengthen the field pattern and help break up views of the bulk of the paneled area. The southern boundary to D17 is to be infilled and planted with intermittently spaced native hedgerow trees to break up views southeast from this PRoW, as well as boundaries to fields D18,20 and 22.

### New hedges

New hedges are proposed to the east of the PRoW, set back some 10m to allow for the bridleway and with the addition of hedgerow trees to mitigate views into the Site from this bridleway. These hedges also act to mitigate views from 'The Grange' to the northeast and southeast.

A further new hedgerow is proposed to the north of field D15 where none exists, mitigating views from the north, including from the bridleway beyond the Site.

### Grassland mixes

Tall herb mixes are proposed 10m either side of existing ditches with a flower rich pollinator mix to be planted under existing overhead cables.

Flower rich pollinator mix is also proposed to the northern boundaries of fields D14,15,17 and 20.

Elsewhere, within the Site a tussock mix is proposed around existing and proposed boundary vegetation.

### Adverse effects:

- Panels and structures across the landscape
- Increased hard standing areas

### Operation (Year 15)

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

This view will become significantly more enclosed as the existing and proposed vegetation will have begun to fully establish providing hedges of some 5m (where existing vegetation has been managed to grow out) to form strong field boundaries and varied layers of vegetation. Close distance views will be experienced of a wide, hedged bridleway with tussock grassland margins whilst mid distance views will be broken up by tall hedges with hedgerow trees, creating a more interesting and layered landscape. Small blocks of scattered trees will augment the well wooded scene in this location with longer distance views of more open landscape to the south.

Overall, in terms of mitigation for the Cottam 1 South Site, due to the importance of woodlands to the setting of the settlements, consideration should be given to the management of existing trees and woodland, enhancing biodiversity value and age structure through new planting and the creation of woodland edge habitats. An increase in grassland reversion should also be encouraged, increasing the occurrence of semi-natural habitats. The aim should also be to plan new woodland in the most suitable locations. This may include in and around settlements, where woodland would help integrate new development into the landscape and in more intimate low-lying areas, where woodland would help create a mixed pattern of land use.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

### Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.





Significance of Effect	Moderate-Major <b>Significant</b>	Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor <b>Not Significant</b>
Level of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Magnitude	High	High	Medium	Low
	Substation This viewpoint is outside the 2km study area and there would be no view of the Substation at Cottam 1.			
	Cable Route Corridor Viewpoint is outside of the 0.5km study area and there would be no view of this route.			
	Construction Access There would be no view of any construction access from this viewpoint.		Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	
	into the Cottam 1 South Site through field D10. Though this access is in the distance of this view, to the foreground there is a track that will experience vehicular traffic that connects to the access track in the far distance.	<ul> <li>Increased traffic locally</li> <li>Some minor light pollution within open countryside</li> <li>Substation, Battery storage and other associated infrastructure structures visible above existing vegetation</li> </ul>	Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.	



Viewpoint VI	/iewpoint VP11 – TLFe/31/2			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint 11 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. The closest Development to Viewpoint 11 is West Burton Site, located approximately 2.15km to the south, therefore views to the development are limited by intervening field hedgerows and the vegetation bordering Tillbridge Lane and no cumulative visual effects are anticipated.		
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1</b> [ <b>C6.4.8.15.2.1</b> ] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features.  Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



### Viewpoint VP12 - Camm/31/1

### **Viewpoint Baseline:**

The view is located along PRoW, bridleway Camm/31/1, looking southwest towards the southern extent of the Cottam 1 Site/Sites.

Objective: This viewpoint offers views over a low-lying, flat landscape where the wider context of a broad valley is quite evident due to the open nature of the view, and this helps to enhance the sense of scale. The viewpoint shows a typical arable landscape where there are some man-made influences such as the Trent power industry on the far horizon and agricultural buildings at Lower Furze Hill Farm are just evident towards the north (left of view). There is a generous setting of woodland cover where Thorpe Wood and Brattleby Gorse are evident on the far horizon as a feature that stands out in an otherwise featureless skyline. There are also tall hedgerows with one being evident to the east of the bridleway within the verge to the track.

<u>Subjective:</u> The viewpoint depicts a large-scale, open landscape with arable fields divided by land drains. In terms of variety, there is a combination of features such as hedgerows and woodland adding complexity to the view. Thorpe le Fallows is also just evident on the far horizon. In terms of texture, the landscape is simple with well-managed vegetation and muted colours.

Overall: The view is ordinary and typical to local character and the experience is pleasant with a sense of safety and security.

#### Receptors

This viewpoint is representative of views for active recreation, such as riding and passive recreation, such as walking using bridleway Camm/31/1, which links Thorpe Lane and Thorpe le Fallows in the south to Ingham Road in the north.

There are similar views to that provided by Viewpoints VP04, VP05 and VP11 and there are potential sequential cumulative effects along the route of the bridleway.

### **Description of View:**

The foreground of the view comprises a large flat agricultural field with no hedgerows and with further agricultural fields that are visible beyond this since this local collection of fields lacks well-established hedgerows. The middle and long distance therefore yields extensive visibility across the open agricultural fields. To the right-hand side of the view, there is the farmstead and associated large-scale agricultural buildings at Lower Furze Hill and to the left-hand side of the view there is Thorpe Wood, Brattleby Gorse and Cammeringham Low Covert. The remainder of the horizon is made up of trees, hedgerows, and farm buildings in the middle and long distance. There are some vertical elements in the view, including agricultural buildings at Lower Furze Hill and Cold Harbour, telegraph poles and associated cables, but these are very minor elements in the context of the expansive landscape and the dark wooded backdrop.





### **Receptor susceptibility to change**

In terms of forces for change for VP12, the landscape has a strong rural character, but tranquility levels are being disturbed by development pressures from the larger scale settlements and major routes across the area. Tranquility is however associated with the winding lanes, which adds to their sensitivity, but landscape-scale projects such as the Trent Vale Landscape Partnership can help by offering increased recreational and educational opportunities within these areas.

**Overall,** the susceptibility for VP12 is conditioned by the limited network of footpaths and bridleways and the availability of the rural roads and minor tracks for extended access. The relevant characteristics therefore have a high susceptibility to change without undue adverse effects. There is however scope to increase recreation opportunities including where there are natural features and historical elements to draw interest from residents and tourists.

High

### Value of view

Medium

<u>Scenic:</u> This location appeals to the visual senses where the public bridleway, a drainage feature and a system of local farm tracks combine to give a subtle grain to the landscape. The interruption at this bridleway provides a local point of interest and the opportunity to capture open views across the landscape to the higher landform fringing the Vales.

<u>Cultural:</u> The landscape shows evidence of historic settlement with farms and nucleated villages and small hamlets such as Coates to the north.

<u>Natural:</u> The extensive expanses of semi-natural habitat, rivers, and streams are an important landscape feature such the River Till to the west, where the course can be observed by tracing sinuous belts of riparian habit and riverside trees.

<u>Recreation and Enjoyment:</u> Whilst the landform of the Unwooded Vales Character Area 4a is typically low and subdued, rising landform often provides locations where glimpses of neighboring elevated land are often sufficient to add to the recreation and enjoyment of the area. Typically, these locations occur around Coates to the north, which rises to 10m AOD.

<u>Local Distinctiveness and Sense of Place:</u> The landscape has a 'strong sense of place' with major landform features flanking the lower lying areas creating a broad scale visual containment along the ridgeline to the east at Cammeringham, Ingham and Fillingham.

<u>Health and Wellbeing:</u> The Unwooded Vales Character Area 4a provides a very limited network of PRoW with a dependence on the more direct arterial routes that run east to west across the area linked by the north south bridleway network.

<u>Important Spatial Function:</u> Despite the low levels of woodland cover, the landscape benefits from high levels of visual containment with woodlands such as Thorpe Wood and Coates Gorse.

**Overall,** the value of Viewpoint VP12 is shaped by the interruption of the bridleway with the network of farm tracks and local drainage feature, that provides a local point of interest. These lower lying areas also support intact hedgerows and belts of riverside trees that truncate views and give a feeling of intimacy, enclosure and 'sense of place', and the opportunity to frame and truncate views across the landscape to higher landform fringing the Vales.

### Sensitivity

Range of Features: The location comprises the public bridleway network that forms a north south connection between Thorpe Lane in the south that leads between Brattleby and Sturton by Stow and Ingham Road in the north. The viewpoint depicts a large-scale, flat, open landscape, being exposed at close-range due to the absence of hedgerows and other features.

Importance of View: This is part of the local bridleway network at a location where the distribution of bridleways are limited giving a reliance on the local lanes for riding. This being a north south bridleway connection in a landscape which is otherwise devoid of bridleway connections raises the level of importance of the view.

Number of Receptors: This location captures a limited range of receptors and is primarily a draw for local riders using the bridleway network to travel north south. The location is unlikely to capture a high number of riders from a wider area as there is little opportunity to park on the narrow lanes and ride from here. This is not a recognised destination for riding in the district.

### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Medium to High Not applicable





### Viewpoint VP12 - Camm/31/1

### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be visible due to the absence of the foreground hedgerows bordering the Site/Sites. During the latter part of the construction stage, views would become available of the elevated activities, but the hedgerows within the bordering field systems would give some partial screening such that these activities would be confined to a filtered section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate north and west of this location.

### **Construction Access**

Viewpoint will not be affected by construction traffic due to the distance between the viewpoint and the proposed construction access. There would be no view of any construction access from this viewpoint.

### Cable Route Corridor

Viewpoint is outside of the 0.5km study area and there would be no view of this route.

### Operation (Year 1)

The foreground of the view would change from a large agricultural field to an area of panels. Further agricultural fields beyond would be screened by the panels. The farmstead and associated large-scale agricultural buildings at Lower Furze Hill would be screened by the panels but Thorpe Wood, Brattleby Gorse and Cammeringham Low Covert would remain in the view above the panels. The vertical elements in the view, including telegraph poles and associated cables could add minor cumulative change to the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Scattered tree belt

A belt of scattered trees is proposed to the north of fields D12 and D13 which adjoins that running adjacent to the River Till. This belt provides a strong vegetative buffer and landscape feature in an area relatively devoid of trees. It will mitigate views from the PRoW to the north east as well as those from further north.

### Shelterbelt

### Existing hedges

The existing hedge to the east of the Bridleway at field D24 is to be enhanced with infilling as necessary and the addition of irregularly spaced native hedgerow trees. This will both reinforce the historic field patten and help to mitigate potential views from this Bridleway into the Site in the east.

To the north and east of field D26, the existing hedgerows are to be enhanced to help mitigate views to the east from the PRoW and strengthen the historic field pattern as well as reducing views from 'Cold Harbour' to the east.

### New hedges

A new hedgerow is proposed to the south of field D24, 10m from the adjacent existing ditch.

A new hedge is proposed to the northern boundary of D27 where none exists strengthening the character of this boundary and providing additional screening from views from the north.

### Successional scrub

Successional scrub is to be used adjacent to existing woodland to create a layered effect as well as under overhead power cables adjacent to these woodland areas for ease of maintenance.

### Grassland mixes

Tussock grassland mixes are proposed predominantly around existing and proposed hedgerows with flower rich pollinator mixes used on the northern and eastern aspects where the base of the hedges is likely to be more sunny.

A tall herb mix is proposed 10m either side of the existing ditches on Site creating a varied habitat and open areas around these waterways.

Wildlfower meadow mix is to be seeded under the proposed panels.

### **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

This view will become significantly more enclosed as the existing and proposed vegetation will have begun to fully establish providing hedges of some 5m (where existing vegetation has been managed to grow out) to form strong field boundaries and varied layers of vegetation. Close distance views will be experienced of a wide, hedged bridleway with tussock grassland margins whilst mid distance views will be broken up by tall hedges with hedgerow trees, creating a more interesting and layered landscape. Small blocks of scattered trees will augment the well wooded scene in this location with longer distance views of a more open landscape to the south.

Overall, in terms of mitigation for the Cottam 1 South Site, due to the limited network of public rights of way (PRoW) across the area the aim is to enhance the river corridors and their flood plains for their recreational importance and the Trent is the main river providing a valuable link. The Trent Valley Way in particular provides a long-distance route. The other notable river is the upper parts of the Witham of which the River Till is a tributary. The aims are to extend the non-road network, especially where it can link people to woodlands and river corridors. Trees and hedgerows make an important contribution and improvements on approaches to villages could improve the identity of the local landscape for the benefit of recreation.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

### **Decommissioning**

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With Mitigation, the negative effects of the physical decommissioning will be balanced out by the long-term landscape and visual effects of this mitigation.



	Substation This viewpoint is outside the 2km study area and there would be no view of the Substation at Cottam 1.	Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Growth of existing and proposed vegetation is assumed to be:  Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	
Magnitude	High	High	Medium	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Adverse & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Major <b>Significant</b>	Moderate <b>Significant</b>	Minor <b>Not Significant</b>



	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	in-combination Lifects [cumulative sites]	Cumulative Effects [Cumulative Developments]
	In Summary	In Summary
	There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, there no in combination visual effects are anticipated.	The Cumulative Effects upon viewpoint 12 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. The closest Development to Viewpoint 12 is Tillbridge Solar, located approximately 4.4km to the north therefore no cumulative visual effects are anticipated.
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area
		Aesthetic Aspects of the Landscape
		Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features.  Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low
Type of Effect	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term	
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant



### **Viewpoint VP13 - Fleets Lane, Stow Pasture**

### **Viewpoint Baseline:**

The view is located along Fleets Lane at the small settlement of Stow Pasture, looking towards the southern extent of the Cottam 1 Site/Sites.

Objective: This viewpoint offers views over a low-lying, flat landscape where the wider context of a broad valley is quite evident due to the open nature of the view, and this helps to enhance the sense of scale. The view extends as far as the limestone capped scarp slope in the east where the ridgeline is conspicuous between the settlements of Brattleby in the south and Ingham in the north. The viewpoint shows a typical arable landscape where there are some man-made influences such as Fleets Lane that is prominent in the landscape as it continues south to Sturton by Stow. Residential properties at Ingham Road are also visible in the context of the large-scale arable fields with hedgerows and trees towards the west (left of view). Mast poles are visible and stand tall on the immediate horizon when looking south (right of view). The hedgerow bordering Fleets Lane on both sides is a strong feature with several extended gaps that allow for direct, but framed views across the arable landscape.

<u>Subjective:</u> The viewpoint depicts a large-scale, open landscape divided by arable fields and tall hedgerows with some tree clumps, especially in the northeastern direction sitting to the south of Ingham Road. In terms of variety, the landscape is simple and consistently open that provides a harmonious feeling to the view. In terms of texture, the is well-managed and colour is evident due to the scattering of residential properties that add interest.

<u>Overall:</u> The view is pleasant and typical to local character with single track lanes, tall hedgerows, and strong vertical elements such as telegraph poles. The strong hedgerows surrounding Fleets Lane have some gaps that provide for occasional views across the area. The overall experience of this view is interesting with an overriding sense of safety and security.

### Receptors

This viewpoint is representative of views for passive recreation such as walkers and motorists travelling on Fleets Lane between Fleets Road in the south and Ingham Road in the north.

There are similar views to that provided by Viewpoint VP10 and there are potential sequential cumulative affects along the route of Fleets Lane.

### **Description of View:**

The foreground of the view comprises two large flat agricultural fields divided by Fleets Lane as it leads towards Fleets Road. Further agricultural fields are not visible beyond this since this local collection of fields has well-established and dense hedgerows. The middle and long distance therefore yields limited visibility across the agricultural fields. To the right-hand side of the view, there is a framework of hedged fields and to the left-hand side of the view there is the same field networks but with extended views towards residential properties at Stow Pasture. The remainder of the horizon is made up of hedgerows and woodlands where visibility towards the middle and long distance is confined to gaps in the hedgerows and field entrances. There are some vertical elements in the view, including telegraph poles and associated cables and these are notable elements in the context of this close-range and enclosed landscape.





# **Receptor susceptibility to change**

In terms of forces for change for VP13, there are sensitive rural landscape features such as the hedgerows since the most widespread change has been agricultural intensification and the change from pastoral to arable cropping that has resulted in the loss of hedges, and consequently, increase in field size. The restoration of hedgerows is therefore important and the loss of pasture that is particularly evident around settlements, where grazing animals and smaller field sizes contribute to the setting and structure of several villages.

Overall, the susceptibility for VP13 is conditioned by the flat, open landscape and whilst the aim is to plan new tree planting around key settlements, woodland does not always form a significant component of this landscape. In consideration of its open and expansive character at this location, extensive new woodland planting would not be generally inappropriate. The relevant characteristics of the landscape therefore have a medium susceptibility to change without undue adverse effects. However, there is significant benefit with appropriate tree planting that could be used in and around settlements to increase the occurrence of semi-natural habitats and maintain the perception of a 'well-treed' landscape.

Medium

# Value of view

<u>Scenic:</u> This location appeals to the visual senses where the local system of the 'east-west' road network combines with the 'north-south' network to give a subtle grain to the landscape. The interruption of the two road systems provides a local point of interest and the opportunity to capture open views across the landscape to the higher landform fringing the Vales.

<u>Cultural:</u> The landscape shows evidence of historic settlement with farms and nucleated villages and small hamlets such as Coates to the northeast and Stow to the west.

Natural: The extensive expanses of semi-natural habitat, rivers, and streams are an important landscape feature such the River Till to the east, where the course can be observed by tracing sinuous belts of riparian habit and riverside trees.

<u>Recreation and Enjoyment:</u> Whilst the landform of the Unwooded Vales Character Area 4a is typically low and subdued, rising landform often provides locations where glimpses of neighboring elevated land are often sufficient to add to the recreation and enjoyment of the area. Typically, these locations occur around Coates to the northeast, which rises to 10m AOD.

Local Distinctiveness and Sense of Place: The landscape has a 'strong sense of place' with major landform features flanking the lower lying areas creating a broad scale visual containment along the ridgeline to the east at Cammeringham, Ingham and Fillingham.

<u>Health and Wellbeing:</u> The Unwooded Vales Character Area 4a provides a very limited network of PRoW with a dependence on the local system of 'north south' and 'east west' local road networks.

<u>Important Spatial Function:</u> Despite the low levels of woodland cover, the landscape benefits from high levels of visual containment with woodlands such as Thorpe Wood, Coates Gorse and woodland around Coates.

**Overall,** the value of Viewpoint VP13 is shaped by the interruption of the viewpoint with the system of 'east west' and 'north south local lanes. This interface provides local points of interest near to their intersections, especially where they are marked by farmsteads or small settlements such as Stow Pasture. These lower lying areas also support intact hedgerows and belts of riverside trees that truncate views and give a feeling of intimacy, enclosure and 'sense of place', and the opportunity to frame and truncate views across the landscape to higher landform fringing the Vales. Medium

# Sensitivity

Range of Features: The location comprises the local road network that forms an east west connection between Ingham and Stow. There are roadside hedgerows and riparian vegetation creates a small level of visual containment to the east of this location.

Importance of View: This is part of the local road network at a junction with the east west road network. This being a 'T' junction which is otherwise devoid of a range of features raises the level of importance of the view.

Number of Receptors: This location captures a limited range of receptors and is primarily a draw for local residents using the road network to travel east west and north south by car. The location is unlikely to capture a high number of visitors from a wider area as there is little opportunity to park on the narrow lanes and walk from here. This is not a recognised travel destination in the district.

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Not applicable

Medium





# Viewpoint VP13 - Fleets Lane, Stow Pasture

Construction

# Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic. noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of the foreground hedgerows bordering Ingham Road. During the latter part of the construction stage, views would become available of the elevated activities, but the hedgerows bordering Ingham Road and within the surrounding field systems would give some partial screening such that these activities would be confined to a filtered

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

section of the view.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate north of this location and in the wider landscape to the west.

#### **Construction Access**

# Operation (Year 1)

The foreground of the view would change from two large agricultural fields to two areas of panels. The further agricultural fields beyond this would no longer be visible due to the intervening panels. The remainder of the horizon made up of woodlands would remain visible through gaps in the hedgerows and field entrances. The vertical elements in the view, including telegraph poles and associated cables would bring very minor cumulative changes to the view.

The Effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### helterbelt

A shelterbelt is proposed to the western boundary of fields D2 and D5 mitigating views into the Site from Fleets Lane to the southwest.

#### **Existing hedges**

Existing hedges to the north and south of field D3 are to be managed to a height of 5m with the additional of informally spaced hedgerows trees augmenting the total tree cover locally on the settlement edges and helping to mitigate views into the Site from Ingham Road in the immediate setting and over the wider Site. An enhanced hedgerow to the south of field D2 mitigates views from Fleets Lane to the west.

#### New hedges

A new hedge is proposed to the northern boundary of field D2 where none currently exists to mitigate views from the north of the Site. Additional Tree planting within the proposed hedge will help to augment the existing landscape and add to the general tree cover in the area, whilst joining up with existing vegetation in field D3 to the east.

A further new hedge is proposed running broadly north south to the eastern boundary and abutting a ditch line which breaks up the field. Additional hedgerow planting will break up views of the Site from the west and help to strengthen the overall field pattern locally.

Turtle Dove mitigation

# **Grassland mixes**

A tussock mix is proposed to the boundaries of existing and proposed hedges with flower rich pollinator mixes proposed on south and west facing hedge bases. Wildflower meadow mix is to be seeded beneath panels.

#### Adverse effects:

- Panels and structures across the landscape
- Increased hard standing areas
- Increased traffic locally
- Some minor light pollution within open countryside
- Substation, Battery storage and other associated infrastructure structures visible above existing vegetation

# **Operation (Year 15)**

Secondary mitigation such as planting, and grass seeding would be taken into account at this stage to include the following changes to the landscape:

This view will become more enclosed as the proposed new hedgerows will have established to create a strong field structure and screen views of the solar panels. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the close-range context, the hedgerows will screen solar panels with mid and longer distance views appearing as a layered well-treed landscape with a backdrop of strong woodland features to some views with more distant horizons of hedgerow trees.

Overall, in terms of mitigation for the Cottam 1 South Site, due to the open character of this location within the Unwooded Vales Character Area 4a, the aims should be to plan new tree planting around key settlements and other suitable locations, but to avoid large areas of woodland and instead trees should be typically grouped in small plantations/copses or as individual trees within hedgerows. The creation of new hedgerows and permanent pasture along watercourses is also a priority, enhancing visibility of streams and dykes, whilst increasing the occurrence of semi- natural habitats. Although the remaining hedgerow network is generally strong, there is nevertheless evidence of decline in a number of areas, with gaps and few hedgerow trees.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



	All throughout the construction phase the viewpoint will be affected due to access routes off Ingham Road into the Cottam 1 South Site.  Cable Route Corridor Viewpoint is outside of the 0.5km study area and there would be no view of this route.  Substation This viewpoint is outside the 2km study area and there would be no view of the Substation at Cottam 1.		New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	
Magnitude	Medium	High	Medium	Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Significance of Effect	Moderate <b>Significant</b>	Moderate-Major <b>Significant</b>	Moderate <b>Significant</b>	Minor <b>Not Significant</b>



Viewpoint VI	Viewpoint VP13 – Fleets Lane, Stow Pasture			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint 13 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. The closest Development to Viewpoint 13 is Tillbridge Solar site, located approximately Tillbridge Solar site, therefore no cumulative visual effects are anticipated.		
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1</b> [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Adverse & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



# **Viewpoint VP15 - Squire's Bridge**

# **Viewpoint Baseline:**

The view is located on Ingham Road at Squire's Bridge where the road crosses the River Till, looking south towards the northern extent of the Cottam 1 South Site and north towards the southern extent of the Cottam 1 North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying almost flat landscape within the wider context of a broad vale, which is very conspicuous in this view. The land use is mainly productive arable farmland with many of the large fields under single crop. There is some deciduous woodland including a large, irregular woodland block known as Normanby Gorse that is just visible to the north (centre of view), woodland around the settlement of Coates and poplar shelterbelts which also punctuate the landscape. The pattern of drainage is a key feature at this location and the River Till is notable to the west (left of the view) as it forms a straight canalized section at Squire's Bridge and then takes a meandering course along the eastern edge of the Site/Sites. The watercourse winds through the landscape and is hardly discernable except for a minor tracing of alder and willow trees. In terms of man-made elements, Squire's Bridge with its associated concrete parapet, box piers and scaffold railings create an industrial appearance. These bridge crossings are typical of this landscape and the lack of tree cover immediately around them (and along the banks of the River Till) to mitigate flood attenuation is also a typical feature, but this assists in providing open views across the arable fields in all directions.

<u>Subjective:</u> The viewpoint depicts an exposed, large-scale landscape, that is open in nature due to the absence of hedgerow trees and woodland cover in the foreground. In terms of variety, although the landscape is uniform and mostly consistent, it has some interest in terms of the bridge crossing that lends a distinctive 'sense of place' and 'all round' views. These views also extend as far as the Limestone Scarps and Dipslopes Character Area 6a where the woodlands at Cammeringham and Brattleby form a distinctive feature on the horizon. In terms of texture and colour, the fields are under single crop, and this then gives a monochrome appearance.

<u>Overall:</u> The viewpoint is influenced by the presence of the River Till that passes beneath Squire's Bridge as a local bridge crossing. The watercourse is distinguished by the presence of its canalized section, and lack of tree cover in what is an otherwise open landscape with a strong presence of woodland in the distance. The riparian woodland that follows the meandering course of the River Till is also a distinctive feature as well as the wide grass verges on Ingham Road. The intensive levels of management within this arable farmland add decline to the natural qualities of the view, but the overall impression is that of a simple, calm, and muted landscape.

#### **Receptors:**

This viewpoint is representative of views available to users travelling on Ingham Road. This section of the road leads from Stow in the west towards Ingham in the east and is host to a variety of users including cyclists, horse riders and walkers.

#### **Description of View:**

The foreground of the view comprises two large flat agricultural fields divided by the green lane as it leads towards the bridge crossing over the River Till. Further agricultural fields are not visible beyond this since this local collection of fields has well-established and dense hedgerows. The middle and long distance therefore yields no visibility across the agricultural fields. To the right-hand side of the view, there is a framework of hedged fields and to the left-hand side of the view there is the same field networks and extended views towards residential properties at Stow Pasture. The remainder of the horizon is made up of hedgerows and woodlands where visibility towards the middle and long distance is confined to gaps in the hedgerows and field entrances. There are some vertical elements in the view, including mature hedgerow trees and these are notable elements in the context of this close-range and enclosed landscape.





# Receptor susceptibility to change

In terms of forces for change for VP15, hedgerow trees are scarce in this location within the Unwooded Vales Character Area 4a and are limited to oak and ash, with willow along watercourses. The flowing tributaries of the River Till have formed small valleys which are barely evident due to the lack of riparian vegetation. These watercourses are not readily distinguished in the landscape due to the lack of waterside trees and riparian habitats. The shift away from mixed farming has impacted upon areas of pasture and grassland habitats, which has made changes to local character and biodiversity.

Overall, the susceptibility for VP15 is conditioned by the need to protect hedgerow trees and ensuring that new development is complimentary to individual trees and those along watercourses. The access network within the area also has poor connections, particularly to the water courses and river corridors where most of the health, recreation, geodiversity benefits need to be relinquished to enhance and promote opportunities. These relevant characteristics of the landscape therefore have a high susceptibility to change without undue adverse effects given there is scope to restore hedgerow and tree cover and to further open up recreation opportunities along water courses.

# Value of view

<u>Scenic:</u> Views towards the Limestone Scarps and Dipslopes Character Area 6a part of key views across the area. The views from Ingham Road capture the woodland along the scarp slope defining the ridgeline at Ingham Cliff and Cammeringham.

<u>Cultural:</u> The landscape shows evidence of Roman roads and network of minor enclosure roads and lanes that cross the Unwooded Vales Character Area 4a. The course of Ingham Road is a part of this network.

<u>Natural:</u> There is a diverse character with pasture, arable, woodland and hedgerows that create an intricate and textured landscape. In some places such as these bridge crossing over the River Till, there are 'all round' views capturing this combination of features.

<u>Recreation and Enjoyment:</u> The Scarps and Dipslopes are valued for recreation which often focuses on the locations where the crests of ridges allow views across the area. Views within the Unwooded Vales Character Area 4a from these local bridges that cross the River Till are also important locally.

<u>Local Distinctiveness and Sense of Place</u>: The landscape has a 'strong sense of place' with a subtle regimented character that is reinforced by the geometric patterns of fields. Locations such as Squire's Bridge crossings (where the regimented landscape character is softened by the meandering watercourses) are important in views across the area.

<u>Health and Wellbeing:</u> The Scarps and Dipslopes provide a rural landscape that has remained largely intact but the landscape within the Vales is also intact and can be experienced from the east west minor road network that crosses the area.

<u>Important Spatial Function:</u> The landscape benefits from its low elevation, and the views from these bridge crossing in the lowlands towards the elevated areas, which act as a strong backdrop are important.

**Overall,** the value of Viewpoint VP15 is shaped by the large-scale arable land use that creates a strong sense of identity at this location. There are other features such as the low elevation and the views towards the scarp slope. The 'all-round' views from Squire's Bridge that captures other features such as woodland and hedgerows (that create an intricate and textured landscape) are also important.

# Sensitivity

Range of Features: The location comprises the local road network that forms an east west connection between Ingham and Stow. This is a local 'node' where the minor road network crosses the River Till and gives a distinctive grain to the landscape where the roadside hedgerows, mature trees and riparian vegetation create a small level of visual containment and interest at this location.

Importance of View: This is part of the local road network at a location at a junction with a bridleway where the distribution of public rights of way (PRoW) is limited giving a reliance on the local lanes for informal recreation. This being an east-west road connection at a bridge crossing which is otherwise devoid of a range of features raises the level of importance of the view.

Number of Receptors: This location captures a limited range of receptors and is primarily a draw for local residents using the road network to travel east west by car. The location is unlikely to capture some visitors from a wider area as there is no opportunity to park and walk from here. This is not a recognised travel destination in the district.

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

High

Medium

Medium to High

Not Applicable





# **Viewpoint VP15 - Squire's Bridge**

# Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of the foreground hedgerows bordering Ingham Road. During the latter part of the construction stage, views would become available of the elevated activities, but the hedgerows bordering Ingham Road and within the surrounding field systems would give some partial layering such that these activities would be confined to a filtered section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate east of this location and in the wider landscape to the east.

#### **Construction Access**

All throughout the construction stage the viewpoint will be affected due to Ingham Road having a point of access into the Cottam 1 North Site. The access route is through a local track near Low Farm as it connects to fields C26 and C25.

# Operation (Year 1)

The foreground of the view would change from two large agricultural fields to two areas of panels, but they would be screened by the existing foreground hedgerows. Further agricultural fields are not visible beyond and so this would not change in the view. The framework of hedged fields would remain as well as the extended views towards residential properties at Stow Pasture. The remainder of the horizon made up of woodlands would remain visible above the panels, but this experience would be confined to gaps in the hedgerows and field entrances.

The Effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Existing hedges

Existing hedges to the north and south of field D4 and to the south of field D3 are to be enhanced with additional hedgerow trees to increase the level of tree cover locally and to reinforce the natural and historical field patterns. The eastern boundary hedgerow of D4 that sits next to the River Till will be retained.

#### New hedges

A new hedge is proposed to the north of field D3 where none exists to break up the existing large field. And reduce views south towards the immediate Site and that further to the south. This is a sensitive location due to the open views from Ingham Road and residential properties which has given rise to the proposal to remove solar panels on field D4. With field D4, the southern field boundary hedgerow will be reinforced with hedgerow trees.

# Grassland mixes

A tussock mix is proposed to the boundaries of existing and proposed hedges with flower rich pollinator mixes proposed on south and west facing hedge bases. Wildflower meadow mix is to be seeded beneath panels.

# Adverse effects:

- Panels and structures across the landscape
- Increased hard standing areas
- Increased traffic locally
- Some minor light pollution within open countryside
- Substation, Battery storage and other associated infrastructure structures visible above existing vegetation

# **Operation Magnitude (Year 15)**

Secondary mitigation such as planting, and grass seeding would be taken into account at this stage to include the following changes to the landscape:

This view will become more enclosed as the proposed new hedgerows will have established to create a strong field structure and screen views of the solar panels. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the close-range, the hedgerows will screen the solar panels with mid and longer distance views appearing as a layered well-treed landscape with a backdrop of strong woodland features to some views with more distant horizons of hedgerow trees and some areas of woodland. The open character of the River Till at this point will be maintained.

**Overall,** in terms of mitigation for the Cottam 1 South Site, many of the rural villages have not seen widespread expansion but development pressures continue with the demand for housing, commerce and industry creating visual intrusion and extending the urban fringe. For development associated with the rural villages, specific mechanisms include Village Design Statements, and tree planting around settlement fringes to help integrate new development into the landscape. Due to the open character of this location within the Unwooded Vales Character Area 4a, the aims should be to plan new tree planting around key settlements and other suitable locations, but to avoid large areas of woodland and instead trees should be typically grouped in small plantations/copses or as individual trees within hedgerows.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.

Shrubs: 0.9m at Year 1 and 5m at Year 15.

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long-term landscape and visual effects of this mitigation.



	Construction Access There would be no view of any construction access from this viewpoint.			
	Cable Route Corridor Viewpoint is outside of the 0.5km study area and there would be no view of this route.			
	Substation This viewpoint is outside the 2km study area and there would be no view of the Substation at Cottam 1.			
Magnitude	Medium	High	Medium	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Significance of Effect	Moderate - Major <b>Significant</b>	Major-Moderate <b>Significant</b>	Moderate Significant	Minor Not Significant



	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	in-combination Effects [cumulative sites]	Cumulative Effects [Cumulative Developments]
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint 15 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. The closest Cumulative Development to Viewpoint 15 is the West Burton Solar site, located approximately 3.33km to the southeast, therefore no cumulative visual effects are anticipated.  Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area  Aesthetic Aspects of the Landscape  Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites.
		The intervening settlements and built form would also curtail cumulative visibility.  There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]  Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]  Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant



# Viewpoint VP19 - Bridge over River Till

#### **Viewpoint Baseline:**

The view is located on a local green lane where the lane crosses River Till, looking southeast towards Cottam 1 South Site and northeast towards the Cottam 1 North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising a low-lying almost flat landscape within the wider context of a broad vale, which is only just conspicuous in this view. The land use is mainly productive arable farmland with many of the large fields under single crop. There are some deciduous woodlands including a large, irregular woodland block known as Normanby Gorse that is visible to the northeast (left of view) and tall tree cover along the green lane to the south (right of view) is also a distinctive feature that includes mature ash trees. The pattern of drainage is a key feature at this location and the River Till is notable in the foreground where it forms a deep, straight canalized section and then takes a sharply meandering course through the most western extent of the Site/Sites. The watercourse winds through the landscape and benefits from a strong tracing of alder and willow trees and other riparian vegetation. In terms of man-made elements, the bridge with its associated concrete soffit, steel frame parapet and steel box side sections create an industrial appearance. These bridge crossings are typical of this landscape and the lack of tree cover immediately around them (and along the banks of the River Till) to mitigate flood attenuation is also a typical feature, but this assists in providing open views across the arable fields in all directions.

<u>Subjective:</u> The viewpoint depicts an exposed, large-scale landscape, that is partly open in nature but with some hedgerow trees and woodland cover in the foreground. In terms of variety, the landscape is interesting with tree-lined lanes, mature ash trees, arable fields, field trees and deciduous woodland blocks. There is a feeling of calm and a sense of isolation, and the bridge crossing lends a distinctive 'sense of place' even though it imparts an industrial character. The views from this location extend as far southwest as the Floodplain Valleys Character Area 3a where the Trent power industry is just visible. In terms of texture and colour, although the fields are under single crop giving a monochrome appearance, the presence of the bridge crossing, mature trees and the green lane add interest.

<u>Overall:</u> The viewpoint is influenced by the presence of the River Till that passes beneath this local bridge. The watercourse is canalized but the tree cover on the green lane and the strong presence of Normanby Gorse enhance the quality of the view. The riparian woodland that follows the meandering course of the River Till is also a distinctive feature as well as the tussocky grassland on the steeply inclined banks of the watercourse. There are intensive levels of management within this arable farmland, but the overall impression is that of a quiet and pleasantly attractive landscape.

#### Receptors

This viewpoint is representative of views available to users of the local green lane network. This section of the lane leads from Normanby Road in the west, past the flat top houses, towards the local bridge over the River Till. The lane turns south to meet with Ingham Road or travels straight ahead past Normanby Gorse to the small settlement of Coates and Hall Farm. The lane is host to a variety of users including cyclists, horse riders and walkers.

#### **Description of View:**

The foreground of the view comprises two large flat agricultural fields divided by the River Till. Further agricultural fields are visible beyond this since this local collection of fields has very few well-established and dense hedgerows. The middle and long distance therefore yields extensive visibility across the open agricultural fields. To the right-hand side of the view, there is Ingham Road and the associated residential dwellings at Stow Pasture. To the left-hand side of the view there is the River Till and woodland associated with Thorpe le Fallows including Thorpe Wood and Brattleby Gorse. The remainder of the horizon is made up of expansive agricultural fields and woodlands where visibility towards the middle and long distance is open and expansive. There are some vertical elements in the view, including telegraph poles and cables and some mature hedgerow trees and shelterbelts, but these are not notable elements in the context of this expansive and wide-reaching landscape.





# **Receptor susceptibility to change**

In terms of forces for change for VP19, the woodland and hedgerow network is vulnerable and the main aim is to enhance these features through the planting of small woodlands, tree belts, hedgerow trees and new hedgerows to benefit landscape character. Creating grass margins in arable fields is also a key priority, including increasing the amount of flower rich areas, hedgerows, and species rich grasslands. Planting new hedgerows to restore historic field patterns and creating habitat linkages is also appropriate to counteract the threat to the landscape character and biodiversity. The skylines, key views, watercourses, and river corridors are also key features that are particularly vulnerable to landscape change.

**Overall**, the susceptibility for VP19 is conditioned by the sensitivity of the rural roads and minor tracks, lanes and farm roads that cross the landscape. Driving north to south across the area is relatively straightforward as the A156 runs fairly true to the River Trent and the B1241 follows the almost meandering course of the River Till. Most of the developed settlements are near these roads, however narrow country lanes link east west and this direction of travel is slightly more challenging yielding them as quiet destinations within the Unwooded Vales Character Area 4a. These relevant characteristics of the landscape therefore have a high susceptibility to change without undue adverse effects given there is scope to protect the character and diversity of the road networks through conservation and enhancement of the local lanes and recognition of the value that the strategic routes provide in connections across the region.

High

# Value of view

<u>Scenic:</u> There are strong variations in character and scenic appeal across the differing parts of the Unwooded Vales Character Area 4a. This diversity is a key element of views where they are enclosed, open or partially framed by other features. At this bridge location over the River Till, views are partially famed by the bordering hedgerows and small woodlands.

<u>Cultural:</u> The landscape within the Till Vale provides a culture of 'soft tourism' in the form of walking and cycling often as a part of short breaks. The scope to appreciate the landscape from the PRoW network, green lanes and bridge crossings is a part of this culture.

<u>Natural</u>: The subtle variations in landform and landscape pattern are a feature that merits recognition. The expansive fields of the Till Vale form part of this pattern and are evident from this bridge crossing over the River Till.

<u>Recreation and Enjoyment:</u> There is little direct linkage between the settlements and so the green land the bridge crossing over the River Till provides a linkage with villages such as Willingham by Stow and Stow.

<u>Local Distinctiveness and Sense of Place</u>: There is a strong relationship between landscape character and the watercourses where many views derive their sense of place from distinctive local landmarks and features around their edges. This bridge crossing is influenced by the strong presence of Normanby Gorse that enhances the quality of the view.

<u>Health and Wellbeing:</u> The district has relatively few tourist 'attractions' and many visitors just simply enjoy the scenic walks, including the historic churches, the Till Vale and the Lincolnshire Cliff. The green lane network forms a part of this activity.

<u>Important Spatial Function:</u> The 'nodes' of the Till Vale watercourses (bridges and crossing points) provide important opportunities for views and for appreciating the wider landscape context.

**Overall**, the value of Viewpoint VP19 is shaped by the striking differences where there is a marked contrast between the open, closed and partially nature of the views across the area. The watercourses that meander across the landscape offer interesting views over the Till Vale from their 'nodes' or crossing points.

Medium

# Sensitivity

Range of Features: The location comprises the local farm track network that forms an east west connection. This is a local 'node' where the local track crosses the River Till and gives a distinctive grain to the landscape where the roadside hedgerows, mature trees and riparian vegetation create a small level of visual containment and interest at this location.

Importance of View: This is part of the local network of lanes at a location where the distribution of public rights of way (PRoW) is limited giving a reliance on these local lanes for informal recreation. This being an eastwest road connection at a bridge crossing which is otherwise devoid of a range of features raises the level of importance of the view.

Number of Receptors: This location captures a limited range of receptors and is primarily a draw for those needing access to the isolated farmsteads. The location is unlikely to capture visitors from a wider area as there is no opportunity to park and walk from here. This is not a recognised travel destination in the district.

Medium to High

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Not Applicable





# Viewpoint VP19 - Bridge over River Till

# Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would not be screened due to the absence of the foreground hedgerows bordering local lane. During the latter part of the construction stage, views would become available of the elevated activities, but the hedgerows within the surrounding field systems would give some partial layering such that these activities would be confined to a filtered section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate northeast and southwest of this location and in the wider landscape to the northeast and southwest.

#### **Construction Access**

All throughout the construction phase the viewpoint will be affected due to access routes off Ingham Road into the Cottam 1 South Site.

#### **Cable Route Corridor**

Viewpoint is outside of the 0.5km study area and there would be no view of this route.

# **Operation (Year 1)**

The foreground of the view would change from two large agricultural fields to two areas of panels to each side of the River Till. The further agricultural fields beyond would be screened by the panels in the foreground. The middle and long distance therefore yields extensive visibility across the open agricultural fields. Ingham Road and the associated residential dwellings at Stow Pasture would remain in the view but not in the same context as the panels as they would be set back at this section. The River Till and woodland associated with Thorpe le Fallows including Thorpe Wood and Brattleby Gorse would still remain features of the view but seen in context with the panels. The vertical elements in the view, including telegraph poles and cables could add some minor cumulative changes to the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A scattered tree belt is proposed beyond the tall herb buffer to the River Till. This 5m wide belt of scattered trees will run to the north and east of field E1 around the proposed panels to screen views from the River Till and from the green lane to the north. To the east of the River Till another belt of trees is proposed around the developed area running north/south and then towards the east, mitigating views of the Site from the south and creating a strong buffer to the Riparian landscape.

#### Shelterbelt

A shelterbelt is proposed along the eastern boundary of the PRoW which runs north/south creating a pleasant and enclosed route whilst mitigating views of the Scheme to the east. Shelterbelt planting should be introduced to the western boundary of field E1, this will mitigate views from the PRoW that runs south to Ingham Road.

#### **Existing hedges**

The existing hedge to the north of field E2 is to be enhanced and managed to grow out to 5m with the addition of irregularly spaced native trees to help mitigate views from the lane. Reinforce hedgerow to the north of the field E1 to mitigate views from the unnamed road.

# Turtle Dove mitigation

A large field (F1,F2 and F7) of Turtle Dove habitat is proposed to the south of the River Till northwest of this viewpoint with a 5m buffer of existing groundcover vegetation. Some open views will be retained across to the west with existing boundary and riparian vegetation retained.

#### **Grassland mixes**

A tall herb mix buffer of min. 30m and 50m wide in places is proposed either side of the River Till to retain the open feature and provide suitable riparian habitat around this waterway.

North of the River Till in fields F3 and F6, a minimum 30m buffer will comprise predominantly tall herb mix with a tussock mix beyond and around the existing ditch and hedge line running north.

Elsewhere, a flower rich pollinator mix is proposed around field boundaries, with wildflower meadow planting under the proposed paneled areas.

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

This view will become more enclosed as the proposed scattered trees and shelterbelt will have established to create a strong field boundary structure and screen views of the solar panels. Existing hedges will have been managed to grow out to 5m reinforcing the vertical structure locally. In the close-range context, the hedgerows will screen the solar panels with mid and longer distance views appearing as a layered well-treed landscape with a backdrop of Normanby Gorse to the northeast and more distant tree lines to the south with the riparian tree cover around the River Till as a distinctive feature.

Overall, in terms of mitigation for the Cottam 1 North Site, due to the sensitivity of the rural lanes and tracks, the hedgerows should be protected to ensure they continue to provide effective green infrastructure corridors. The approach roads to the smaller settlements are a key feature that add to the identity of the local landscape and lines of trees are often characteristic in these locations. Tree planting should be confined to hedgerows (i.e., not on verges) on all historic enclosure roads and tracks.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



	Substation This viewpoint is outside the 2km study area and there would be no view of the Substation at Cottam 1.	Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	
Magnitude	Medium	High	Medium	Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Major-Moderate <b>Significant</b>	Moderate - Major <b>Significant</b>	Minor-Moderate <b>Not Significant</b>



Viewpoint VI	ewpoint VP19 - Bridge over River Till			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, there no in combination visual	In Summary  The Cumulative Effects upon viewpoint 19 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects.		
	effects are anticipated.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape  Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features.  Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Adverse & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



# Viewpoint VP21 - Stow/83/1

#### **Viewpoint Baseline:**

The view is located on the PRoW, footpath (Stow/83/1), looking directly north over the Cottam 1 North Site and directly south over the Cottam 1 North Site with the Cottam 1 South Site beyond.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising a low-lying, gently rolling arable landscape within the wider context of a broad vale, which adds to the sense of scale of this view. The land use is mainly productive arable farmland with many of the large fields under single crop. There are plantation woodlands including Larch Plantation that forms a distinctive geometric pattern and is silhouetted on the horizon to the north (centre of view). There are other geometric blocks including New Plantation to the west (left of view) and Fox Covert at Grange Farm to the south. These woodlands combine to form a strong feature and a feeling of enclosure due to their localized concentration on the gently rolling landform. In terms of man-made elements, there are occasional farmsteads including Greystones Farm that is just visible on the horizon (right of view) and Glebe Farm that are both located on Willingham Road to the southwest of the settlement of Fillingham. The tall, but intermittent hedgerow to the south side of the footpath also gives a sense of enclosure and visual containment to this location.

<u>Subjective:</u> The viewpoint depicts a large-scale, gently undulating, open landscape, being exposed at close-range and in the mid distance due to the absence of hedgerows. In terms of variety, the combination of landscape features includes farm buildings, plantation woodland, tall hedgerows, occasional hedgerow trees and arable fields that present a simple, well-balanced composition, but the increased field sizes add some discordancy. In terms of texture and colour, this is an intensively managed land use that is mainly muted in colour, but the gently undulating topography adds some interest.

Overall: The view is influenced by the open arable fields and the woodlands on the horizon that form a significant component and add balance to the landscape. The location offers some intimacy despite the open nature to the north due to the lower elevation of the view, the bordering hedgerow to the south and the small woodland thicket (to the east) just to the northwest of Low Farm on Long Lane. The horizon closes down the view since the landform rises to a high point on Willingham Road at approximately 20m AOD. The overall experience is interesting and very pleasant, with some depth to views and strong contrasting features due to the presence of the plantation woodlands on the horizon and varied landform. This is also an isolated location with a distinct absence of settlement, built form or other man-made features.

#### **Receptors:**

This viewpoint is representative of views available to walkers using the footpath (Stow/83/1). This section of footpath leads from Long Lane (at the right-angled bend with Low Farm) leading west past Grange Farm and Hall Farm at Coates to eventually join with Ingham Road.

#### **Description of View:**

The foreground of the view comprises a large gently sloping agricultural field with no hedgerow to the front part. Further agricultural fields are just visible beyond even though this local collection of fields has very well-established and dense hedgerows. The middle and long distance therefore yields some visibility across the agricultural fields towards Larch Plantation. To the right-hand side of the view, there is the local collection of agricultural fields set in the context of a small woodland and to the left-hand side of the view there is a similar collection of agricultural fields. The remainder of the horizon is made up of hedgerows, agricultural fields, and woodlands where visibility towards the middle and long distance is evident even though there is a strong hedgerow network. There are very few vertical elements in the view in the context.



High



#### Receptor susceptibility to change Value of view **Embedded Mitigation** Sensitivity In terms of forces for change for VP21, the existing Scenic: There are locations where panoramas are framed by larger areas of **Range of Features:** The location comprises Embedded Mitigation would be taken into account at the rural landscape features are sensitive, in particular woodland or woodland is present on the horizon. Some panoramas include the public footpath network that forms an construction, operation (Year 1 and Year 15) and the network of hedgerows since the most undulating landform, which accentuates the presence of the woodland. This east west connection between Ingham and decommissioning stages of the Scheme. This Embedded widespread change has been in agricultural feature is typical along the footpath (Stow/83/1). Coates. This is a short section of footpath Mitigation is also referred to as primary mitigation and would intensification and the change from pastoral to where there are extended views that include the following measures: arable cropping that has resulted in the loss of capture Ingham Road to the south and its <u>Cultural:</u> The landscape has small villages, hamlets and farms that are evenly hedges, and consequently, increase in field size. The associated tree cover. The hedgerows, Panels to be set a minimum of 15m from adjacent PRoW. distributed across the area. This includes the settlement of Coates and loss of pasture is particularly evident around mature trees, woodland and riparian Yawthorpe and their outlying farmsteads including Greystones Farm and settlements, where grazing animals and smaller field vegetation create some level of visual Panels to be set a minimum of 50m from adjacent residential Glebe Farm that feature in the views from footpath (Stow/83/1). sizes contribute to the setting and structure of containment and interest at this location. property boundaries. several villages. Natural: Sizable areas of wet woodlands are also notable along the Panels to be set minimum of 20m from major watercourses and *Importance of View:* This is part of the watercourses and tributaries associated with the River Till. Many of these **Overall**, the susceptibility for VP21 is conditioned by footpath network at a location where there minimum of 8m from minor watercourses. woodlands form geometric shapes such as Coates Gorse, which borders the the flat, open landscape and whilst the aim is to plan are extended views and features of interest, small watercourse to the west of Low Farm. new tree planting around key settlements, largetherefore raising the importance of the view Panels to be set a minimum of 3m from Site boundaries. scale woodland does not form a significant Recreation and Enjoyment: The Unwooded Vales Character Area 4a is valued component of this landscape, and in considering its *Number of Receptors:* This location is Existing hedges are to be allowed to grow out and will be for recreation which often focuses on the PRoW network with views towards open and expansive character, extensive new primarily a draw for local residents using the managed to a height of 5m. Hedgerow trees will be encouraged the ridgeline. Other PRoW networks tend to have a north south focus such footpath network The location is unlikely to to grow out to add further thickening and growth to the field woodland planting would be generally inappropriate. as Stow/83/1). These relevant characteristics of the landscape capture some visitors from a wider area as boundaries with the addition of new hedgerow trees as therefore have a high susceptibility to change this is not a recognised travel destination in appropriate, randomly spaced along the length of existing Local Distinctiveness and Sense of Place: The landscape has a 'strong sense of without undue adverse effect. However, there is the district. place' endorsed by the strong agricultural character. Wide areas retain a significant benefit with appropriate tree planting that sense of rural tranquility and intactness away from the main road network. could be used in and around settlements to increase Lighting will be limited to downlights within substations and These areas can only often be reached by footpaths such as Stow/83/1. the occurrence of semi-natural habitats and battery banks only and used when maintenance or security is maintain the perception of a 'well-treed' landscape. required. Lighting will be PIR operated and will be calibrated to Health and Wellbeing: There is a limited network of PRoW meaning that the vehicle and personnel movements. All visible lighting would be river floodplain can be the main focus for recreation. The footpath 50W, installed at a maximum height of 4m with cowls fitted to (Stow/83/1) has views towards Coates Gorse and other riparian vegetation prevent light spillage. Lighting required within panelled areas which borders the meandering watercourse to the west of Low Farm. will be manually operated. There will be no lighting on perimeter fencing. *Important Spatial Function:* Many village place names provide some evidence of 'time depth' with several woodlands being named after a local village such The visual effects **with only** the Embedded Mitigation taken into as Coates Gorse, indicating it once belonged to the community of Coates. account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have Overall, the value of Viewpoint VP21 is shaped by the distinctive character of been carried out but will have had limited physical or visual the woodlands which are local landmarks. The landscape possesses areas of impact at this Embedded Mitigation stage. deciduous and native woodland, including wet woodland. However, in recent decades, agricultural intensification and farm amalgamation is leading to a more homogenous landscape. Where these woodlands survive, such as Coates Gorse, they are important features in the views across the area.

Medium to High

Not Applicable

Medium





# Viewpoint VP21 - Stow/83/1

# Activities considered includes, site preparation / enabling works, construction, and commissioning w

Construction

preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would not be screened due to the absence of the foreground hedgerows bordering the public footpath. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate south, east and west of this location and in the wider landscape to the east and west would not fundamentally change.

# **Operation (Year 1)**

The foreground of the view would change from a large gently sloping agricultural field to an area of panels. Further agricultural fields beyond would be screened by panels in the foreground. Views of Larch Plantation would remain but set in context with the panels. The remainder of the horizon is made up of woodlands would be evident above the panels. There are very few vertical elements so no minor cumulative changes to this element of the view are predicted.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Native scattered tree blocks

To the east of the Site, a long stretch of native scattered trees will form a cohesive buffer to the eastern boundary where additional tree cover is appropriate, providing screening and biodiversity benefits.

#### Shelterbelt Planting

To the north of the PRoW, and set beyond the existing hedgerow, a 5m buffer is proposed to reinforce the vegetation adjacent to this PRoW where panels will sit immediately beyond. This buffer will augment the existing screen to mitigate views directly into the Site.

#### New Hedgerows

A new hedgerow is proposed between C20 and C22 strengthening the field pattern and completing the line of the existing hedge to the north. New hedgerows are proposed around C27 where existing tree lines delineate this field.

# Existing hedgerows

Good quality hedges exist to the western edges of fields C 23-25 and to the southwestern boundary of C23. Further north within the Site and to the northern boundary of field C23, the hedgeline is to augmented with additional irregularly spaced hedgerow trees and infilled as necessary.

#### Turtle dove mitigation

To the south of this viewpoint, field C26 is proposed as Turtle Dove mitigation planting. With existing hedgerows with hedgerow trees retained and small blocks of woodland to the eastern and southern boundary creating interest and height within the landscape.

#### Grassland Mixes

A tussock grassland mix is to be provided between the proposed buffer planting and the Site boundary fencing with wildflower grassland mix beneath proposed panels.

To the eastern boundary of fields C23, 24 and 25 and to the south of field 28, tall herb mix is proposed, whilst to the north of field 25, a flower rich pollinator mix adds to visual variation and varied biodiversity.

#### Adverse effects:

- Panels and structures across the landscape
- Increased hard standing areas
- Increased traffic locally
- Some minor light pollution within open countryside

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

This view will retain the close-range view of a field with low cover to encourage turtle dove populations to the south. To the north, both the new and the enhanced hedgerow planting and shelterbelts (having become well established in the mid distance) will mitigate views of the panels and create a layered, multi-interest view with a strong backdrop of woodland on the distant horizon. Blocks of proposed native scattered trees on the east of the Site/Sites will help to add interest to the view and mitigate views further northeast.

Overall, in terms of mitigation for the Cottam 1 North Site, consideration should be given to the planning of new tree planting around key settlements and other suitable locations where the PRoW connect between settlements. Trees should be typically grouped in small plantations/copses or as individual trees within hedgerows. The creation of new hedgerows and permanent pasture along watercourses is also a priority, enhancing visibility of streams and dykes, whilst increasing the occurrence of semi- natural habitats. Although the remaining hedgerow network is generally strong, there is nevertheless evidence of decline in a number of areas, with gaps and few hedgerow trees.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



	Construction Access There would be no view of any construction access from this viewpoint.  Cable Route Corridor Viewpoint is outside of the 0.5km study area and there would be no view of this route.  Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	
Magnitude	Medium	High	Low	Very Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Moderate – Major <b>Significant</b>	Major - Moderate Significant	Minor <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint VF	ewpoint VP21 - Stow/83/1				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]			
	4.6				
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint 21 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. The closest Development to Viewpoint 21 is Tillbridge Solar, located approximately 3km from the viewpoint and no cumulative visual effects are anticipated.			
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.			
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area			
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.			
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:			
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]			
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.			
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.			
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low			
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Adverse & Long Term Decommissioning: Neutral & Short Term			
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant			



# Viewpoint VP32 - Fill/86/1

#### **Viewpoint Baseline:**

The view is located on PRoW, bridleway (Fill/86/1), looking directly west onto the Cottam 1 North Site and southwest towards the Cottam 1 South Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a very gently undulating, low-lying landscape within the wider context of a rolling vale lowland. This landscape extends west from the foot of the limestone capped scarp slope which is host to the Limestone Scarps and Dipslopes Character Area 6a. The landform at this location extends to a local spur at Greystones Farm Glebe Farm on Willingham Road and this rising land closes down views towards the north. Greystones Farm and Glebe Farm are visible on the skyline along with their associated woodland cover. The footpath follows a north south alignment to reflect the field boundary and there are open views since the fields to each side have no boundary hedgerows and just a simple ditch with ruderal weed growth. The Larch Plantation that sits on the southern side of Willingham Road and to the east of Side Farm is only just visible on the horizon to the west (left of view) where the landform is at a lower elevation since this local spur of land also extends southwest from Greystones Farm and closes down views towards this direction. In terms of man-made features, the footpath is dominant in the landscape, otherwise there are little else in terms of built influence. New plantation is also visible on the distant horizon along with woodland associated with the settlement of Coates and the scattered trees in the hedgerows are also a prominent feature.

<u>Subjective:</u> The viewpoint depicts a large-scale, gently undulating, open landscape, being exposed at close-range and in the mid distance due to the absence of hedgerows. In terms of variety, the combination of landscape features includes farm buildings, plantation woodland, occasional hedgerow trees and arable fields that present a simple, well-balanced composition, but the increased field sizes add some discordancy. In terms of texture and colour, this is an intensively managed land use that is mainly of muted tones, but the gently undulating topography and the horizon woodland adds some interest and sense of scale.

<u>Overall:</u> The view is influenced by the open arable fields and the woodlands on the horizon that form a significant component and add balance to the landscape. The location offers no intimacy due to the higher elevation of the view, the lack of field hedgerows and the intensive arable land use. The horizon closes down the view since the landform rises to a high point on Willingham Road at approximately 20m AOD. The overall experience is interesting and very pleasant, with some depth to views and strong contrasting features due to the presence of the plantation woodlands on the horizon and varied landform. This is an isolated location with a distinct absence of settlement, built form or other man-made features.

# **Receptors:**

This viewpoint is representative of views available to walkers using the bridleway (Fill/86/1). This section of bridleway leads from Short Lane (at the settlement of Ingham) to the junction with footpath (Ingh/17/1) then in a diagonal direction and then heading then north to eventually join with Willingham Road.

#### **Description of View:**

The foreground of the view comprises a large gently sloping agricultural field with no hedgerows to the front part. Further agricultural fields are visible beyond since this local collection of fields has very few well-established hedgerows. The middle and long distance therefore yields some visibility across the agricultural fields towards Larch Plantation and New Plantation. To the right-hand side of the view, there is the local collection of agricultural fields set in the context of a Willingham Road and to the left-hand side of the view there is a similar collection of agricultural fields that have very little extended visibility. The remainder of the horizon is made up of hedgerows, agricultural fields, and woodlands where visibility towards the middle and long distance is evident even though there is a strong hedgerow network. There are very few vertical elements in the view.





#### Value of view **Embedded Mitigation** Receptor susceptibility to Sensitivity change In terms of forces for change for VP32, the Scenic: The PRoW network such as bridleway (Fill/86/1), appeals to the Range of Features: The location Embedded Mitigation would be taken into account at the construction, operation small woodlands are sensitive elements of visual senses due to absence of settlement and there is a remote, tranquil comprises the public bridleway (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded the landscape. The pressures are character to this location away from the busy road network. network to the west of the Mitigation is also referred to as primary mitigation and would include the following centered around existing woodlands that settlement of Fillingham. This is ar measures: are often small and isolated and suffer open location 'all-round', due to Cultural: The landscape shows evidence of generally little settlement, with from lack of management and there the absence of field hedgerows. Shelterbelt vegetation should be introduced the northern boundary of fields C14 and only the isolated farmsteads at Glebe Farm and Greystones Farm. The should be consideration for new planting There is a sparse range of C17 and to the western boundary of C14 to link Larch Plantation to New Plantation. prevalent use brick in these farmsteads adds visual unity to the landscape. schemes to take full advantage of

Vales Character Area 4a, particularly along the PRoW network. **Overall,** the susceptibility for VP32 is conditioned by the susceptibility of the Limestone Scarps and Dipslopes that rises above the Trent Vale and forms a prominent and distinctive landscape feature, and where there is a visual relationship with the adjoining Till Vale.

The Roman roads are also a key consideration created to link London with York. Superimposed on the north south axis of the Roman road is a less dominant but nonetheless distinctive pattern of east west routes and field boundaries that add geometric character. These relevant characteristics of the landscape therefore have a high susceptibility to change without undue adverse effects. The aims should also ensure there is a positive relationship between Limestone Scarps and Dipslopes Character Area 6a and Unwooded Vales Character Area 4a to ensure new planting does not negatively impact upon the open character between these two adjoining areas, especially where open visibility is an important feature locally.

High

opportunities to enhance the Unwooded

Natural: There are extensive expanses of agricultural landscape, which are carefully managed, resulting in very few areas of semi natural habitat. Agricultural reservoirs are a key feature, and some are shrouded in tree cover such as the U-pond to the north of Short Lane at Ingham. Where present, this woodland gives added significance to views such as from bridleway (Fill/86/1),

Recreation and Enjoyment: The bridleway network has a local identity, but connections are limited and often severed by the road network in most places. This location shows that Bridleway (Fill/86/1) forms part of a wider framework to the west of Fillingham and Ingham, extending as far as Glentworth.

Local Distinctiveness and Sense of Place: The landscape has a limited 'sense of place' due to its productive and utilitarian character, however bridleway (Fill/86/1) is open along some of its route with few hedgerows, which creates expansive views, and this is the local distinctiveness.

Health and Wellbeing: The Unwooded Vales Character Area 4a provides limited areas for recreation due to the distinct lack of PRoW, but this location linking with Fill/86/1 is well-provided for.

Important Spatial Function: The landscape benefits from the high level of visual unity from the extensive arable land use and sparse settlement to interrupt the skyline.

Overall, the value of Viewpoint VP32 is shaped by its a geometric modern landscape of planned enclosure and modern field systems. There is some time depth associated with the presence of the isolated farmsteads, and the remote tranquil character is a feature of the view, otherwise the landscape presents a simple palette of land uses and features.

features except for long views to the west and east that capture the open arable fields and their associated woodland cover including the Larch Plantation that sits on the southern side of Willingham Road and to the east of Side Farm.

*Importance of View:* This is an open location on the bridleway network which passes between Ingham and Glentworth. The bridleway network is sparse in this locality, which raises the level of importance of the view.

*Number of Receptors:* This is the public bridleway network that connects the settlements of Ingham and Glentworth (with a detour via the local road network). Being in close proximity to Filllingham and Fillingham Castle, this may extend the number of receptors from local users to those from a wider area. Since the network is disjointed this may also not attract riders from the wider area.

Add new hedgerows to the boundaries separating C27, C28, C29 and C30 to further mitigate views into the site and reduce the impacts of the panels. Shelterbelt planting should be introduced to the eastern boundary of the Site.

Panels are to be set back 15m from the adjacent PRoW with 5m between the proposed new hedge and the Site boundary fencing to allow for sufficient growth of the new vegetation and to allow for the managed outgrowing of existing hedges.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to set back 20m from adjacent PRoW.

Not Applicable

Site boundary fencing to be set back 5m from adjacent existing/proposed hedgerows to allow for proposed thickening and growth.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Medium Medium to High





# Viewpoint VP32 - Fill/86/1

# Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would not be screened due to the absence of the foreground hedgerows bordering the public footpath. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate landscape to the north, south and east of this location and the wider landscape to the north, south and east and west would also not fundamentally change.

# **Construction Access**

There would be no view of any construction access from this viewpoint.

# Cable Route/s

Viewpoint is outside of the 0.5km study area and there would be no view of this route.

# **Operation (Year 1)**

The foreground of the view would change from a large gently sloping agricultural field to an area of panels. Further agricultural fields beyond would be screened by panels in the foreground. The views towards Larch Plantation and New Plantation would remain except in the context of the new panels. The remainder of the horizon is made up of woodlands would remain in the view but set in the context of the new panels. There are very few vertical elements so no minor cumulative changes to this element of the view are predicted.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Native scattered tree blocks

To the north of field C28 and along the eastern boundary of C23 down to C24, a belt of native scattered trees will form a strong feature and provide visual interest and variation along this part of the Site, mitigating views from the east and the southeast.

#### Shelterbelt planting

Shelterbelt planting is proposed to the northern boundaries of C14 and C17 with additional planting to the western boundary of C14 to link Larch Plantation to New Plantation creating both visual and ecological links. Shelterbelt vegetation should be introduced the northern boundary of fields C14 and C17 and to the western boundary of C14 to link Larch Plantation to New Plantation. Shelterbelt planting should be introduced to the eastern boundary of C23, C24 and C25 to mitigate views from the PRoW to the development sites. Shelterbelt planting running generally west/east across the Site adjacent to Larch Plantation will link this woodland with the surrounding landscape both visually and in terms of creating valuable ecological networks.

#### New Hedgerows

A proposed new hedgerow with irregularly spaced hedgerow trees is proposed to the eastern boundary of the Site at this viewpoint to the east of fields C29 and 30. Proposed new hedges will follow existing ditch/tree lines to field boundaries running north/south, between fields C20, 22 and 27 helping to reinforce the field structure and create visual links as well as breaking up the overall bulk of the panelled area. A new hedgerow to the north of C27 and 29 will mitigate views from further north. Add new hedgerows to the boundaries separating C27, C28, C29 and C30 to further mitigate views into the site and reduce the impacts of the panels.

#### Existing hedgerows

Where existing hedgerows exist across the Site running broadly north/south, these will be enhanced and planted with irregularly spaced native hedgerow trees to break up the somewhat open and exposed landscape. Reinforcement of existing hedgerows will strengthen the overall character and create more of a well-treed scene locally and from further afield.

#### **Grassland Mixes**

Planting along the PRoW (bridleway) is to be a tall herb mix providing a scenic walk/ride along this section of the route. This mix flows round to the west and along the southern border of fields C22, 27 and 30, providing a good open buffer around the existing ditch and small pond.

# Operation Magnitude (Year 15)

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

This view will become significantly more enclosed and views towards the western boundary of the Site/Sites will be screened in the close-range views through the planting of the proposed native hedges which will be managed to a height of 5m. In the middle distance, new and augmented hedgerows will provide a series of strong field boundaries both formally strengthening the existing and historical field pattern and also in creating a multi-layered landscape. Views of the longer distance (were hedgerows to not block these), will be of a layered, well treed landscape with a backdrop of wooded vegetation in places on the horizon. Both new and existing vegetation will have established and begun to mature creating a strong structure to the landscape and reducing the exposed feel of the area whilst retaining its overall character.

**Overall**, in terms of mitigation for the Cottam 1 North Site, consideration should be given to the management existing trees and woodland, encouraging new planting to ensure a varied structure, whilst removing invasive species. The restoration of hedgerows should also be given priority, creating a stronger field pattern and also to bring opportunities to restore grassland and areas of pasture.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

# **Decommissioning**

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



	Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	Flower rich pollinator mixes and tussock mixes are proposed around existing and proposed hedgerows elsewhere within the Site with pollinator mixes concentrated on the south and west facing hedgerow verges.  Adverse effects:  Panels and structures across the landscape Increased hard standing areas Increased traffic locally Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Growth of existing and proposed vegetation is assumed to be:  Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	
Magnitude	High	High	Medium	Very Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Major <b>Significant</b>	Moderate <b>Significant</b>	Negligible <b>Not Significant</b>



Viewpoint VF	Viewpoint VP32 – Fill/86/1			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, there no in combination visual effects are anticipated.	In Summary The Cumulative Effects upon viewpoint 32 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. The closest Cumulative Development to Viewpoint 32 is Tillbridge Solar, located approximately 1.9km from the viewpoint however due to the densely planted vegetation surrounding Willingham Road the site is not visible and therefore has no potential intervisibility.		
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area. There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Adverse & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



# Viewpoint VP36 - Fill/767/1

#### **Viewpoint Baseline:**

The view is located along the route of PRoW, bridleway (Fill/767/1), looking in all directions towards and directly over the Cottam 1 North Site and south towards the Cottam South Site. The view is also looking northwest towards the Cottam 2 Site/Sites.

Objective: This viewpoint offers views of an almost flat, low-lying landscape within the wider context of a rolling lowland that extends well beyond the foot of the limestone capped scarp slope. There are extended views where the boundary vegetation of the Site/Sites is evident in the context of the open fields. The landform at this location falls to a low point and this helps in shielding the field in views from Willingham Road to the south. The footpath follows a 'dog-leg' alignment to reflect the field boundary and is shielded by the hedgerows that have grown tall and although gappy in parts it helps to provide enclosure and intimacy. The Larch Plantation that sits on the southern side of Willingham Road to the east of Side Farm is also clearly visible on the horizon where the landform is at a higher elevation than the bridleway. The large-scale agricultural buildings associated with North Farm are also visible to the west (left of view) along with the large woodland block where the land rises and extends to meet the woodland. The track is also a prominent feature in the landscape as it leads from the bridleway to serve North Farm.

<u>Subjective:</u> The viewpoint depicts a medium-scale landscape where the undulations in topography display a strong landscape pattern with the layering of hedgerows being a prominent feature. The landscape features are balanced with simple additions of farm buildings interspersed with tree cover. The landscape is managed and muted in colour, but overall, the view is not distinctive or 'out of the ordinary'.

Overall: The view is typical in character to the wider open and arable land use where the tall and outgrown hedgerows add some intimacy along the route of the bridleway. There is a sense of security and a safe quality to the landscape. Overall, the experience is bland but pleasant.

#### **Receptors:**

This viewpoint is representative of views available to walkers and horse riders along the bridleway (Fill/767/1) that leads from Glentworth Grange and Kexby Road in the north to meet with Willingham Road in the south

A similar view provided by Viewpoints VP35 and LCC-C-G.

#### **Description of View:**

The foreground of the view comprises a large agricultural field with hedgerows to the front part. Further agricultural fields are visible beyond even though this local collection of fields has a number well-established and dense hedgerows. The middle and long distance therefore yields some visibility across the agricultural fields towards Larch Plantation, New Plantation and Fillingham Low Wood. To the right-hand side of the view, there is the local collection of agricultural fields set in the context of the bridleway (Fill/85/1) and to the left-hand side of the view there is a similar collection of agricultural fields that have very little extended visibility due to the presence of the local tributary of the River Till. The remainder of the horizon is made up of hedgerows, agricultural fields and woodlands where visibility towards the middle and long distance is evident even though there is a strong hedgerow network. There are very few vertical elements in the view in the context.





# Receptor susceptibility to change

In terms of forces for change for VP36, the existing rural landscape features are sensitive, in particular the existing hedgerows since the most widespread change has been in agricultural intensification and the change from pastoral to arable cropping that has resulted in the loss of hedges, and consequently, an increase in field size. The loss of pasture is particularly evident around settlements, where grazing animals and smaller field sizes contribute to the setting and structure of several villages. Many of the rural villages have not seen widespread expansion but development pressures continue with the demand for housing, commerce and industry creating visual intrusion and extending the urban fringe.

**Overall,** the susceptibility for VP36 is conditioned by the flat, open landscape and whilst the aim is to plan new tree planting around key settlements, woodland does not form a significant component of this part of the Unwooded Vales Character Area 4a. In considering the open and expansive character of the landscape, extensive new woodland planting would be generally inappropriate. These relevant characteristics of the landscape therefore have a high susceptibility to change without undue adverse effects. However, there is significant benefit with appropriate tree planting that could be used in and around settlements to increase the occurrence of semi-natural habitats and maintain the perception of a 'well-treed' landscape.

# Value of view

<u>Scenic:</u> This region represents a major east-west link, connecting Lincolnshire with the North of England and the minor road network offers views over a local landscape that is, in parts, scenic with pleasant views. The network of PRoW such as this bridleway (Fill/767/1) are important.

<u>Cultural:</u> The close proximity to Gainsborough as a major historic crossing on the River Trent to the west and the strategic location of Roman roads on the limestone capped scarp slope to the east give rise to a number of historic settlements in the intervening landscape. This includes Fillingham and associated Fillingham Conservation Area and Fillingham Castle registered park and garden (List Entry:10009) to the east.

<u>Natural:</u> The local roads are valuable wildlife corridors since they are often narrow country lanes with grass verges, hedgerows to both sides and high levels of tranquility.

<u>Recreation and Enjoyment:</u> The 'east west' travel direction of local lanes often links the older settlements moving in a more random pattern following minor roads. These roads such as Willingham Road, Fillingham Lane and Kexby Road are popular for recreation as narrow country lanes.

<u>Local Distinctiveness and Sense of Place:</u> The landscape associated with Fillingham Lane and Willingham Road that derive their 'sense of place' from the woodland blocks that contrast with the intensive arable landscape.

<u>Health and Wellbeing:</u> Main roads are significant features in this landscape but the minor road networks and their connecting PRoW, including bridleways are often refuges of tranquility bringing benefits for health and wellbeing.

<u>Important Spatial Function:</u> The local roads play an important role in wayfinding by linking several historic and distinctive smaller string of settlements with the PRoW network.

**Overall**, the value of Viewpoint VP36 is shaped by the bridleway network that links to the local roads (that gain access to smaller villages) which are popular for informal recreation. The PRoW provides attractive destinations as further refuge from the narrow country lanes often with good levels of tranquility and isolation. The cultural value of these bridleways and roads in connecting historic settlements is also a key consideration in terms of value.

# Sensitivity

**Range of Features:** The location comprises the public bridleway network to the west of the settlement of Fillingham. This is an open location, but the footpath follows a 'dog-leg' alignment to reflect the field patterns and the location is shielded by the hedgerows that have grown tall and although gappy in parts it helps to provide enclosure and intimacy. The landscape features are balanced with simple additions of farm buildings interspersed with tree cover bordering the open arable fields. There is associated woodland cover including the Larch Plantation that sits on the southern side of Willingham Road and to the east of Side Farm.

Importance of View: This is an open location on the bridleway network which passes between Ingham and Glentworth. The bridleway network is sparse within this locality, which raises the level of importance of the view.

Number of Receptors: This is the public bridleway network that connects the settlements of Ingham and Glentworth (with a detour via the local road network). Being in close proximity to Filllingham and Fillingham Castle, this may extend the number of receptors from local users to those from a wider area. Since the network is disjointed this may also not attract riders from the wider area.

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set back 50m from adjacent residential dwellings.

Panels to be set back 10m from adjacent ditches.

Site boundary fencing to be set back 5m from adjacent existing/proposed hedgerows to allow for proposed thickening and growth.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Site boundary fencing to be set back 5m from adjacent existing hedgerows to allow for proposed thickening and growth.

Panels to be set a minimum of 3m from Site boundaries.

Hedge planting to be 10m from the existing PRoW.

Proposed and existing hedgerows to be managed at 5m.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Λ.

High

Medium

Medium to High

Not applicable





# Viewpoint VP36 - Fill/767/1

# Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would not be fully screened due to the gappy nature of the foreground hedgerows bordering the public bridleway. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate north, south and west of this location and the wider landscape to the north would also not fundamentally change.

# **Construction Access**

There would be no view of any construction access from this viewpoint.

# **Cable Route Corridor**

Viewpoint is outside of the 0.5km study area and there would be no view of this route.

# **Operation (Year 1)**

The foreground of the view would change from a large agricultural field to an area of panels but the hedgerows to the front part would help screen some of the views. Further agricultural fields beyond would be screened by the panels in the foreground. Views towards Larch Plantation, New Plantation and Fillingham Low Wood would remain but they would be set in the context of the new panels. The presence of the local tributary of the River Till and its associated riparian vegetation would remain as a feature of the view. The remainder of the horizon made up of woodlands would remain as a feature of the view. There are very few vertical elements so no minor cumulative changes to this element of the view are predicted.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Native scattered tree blocks

A block of native scattered trees is proposed to the northwest of North Farm on the northern boundary of field A3 mitigating views from the south, bounding the proposed Turtle Dove mitigation field, and linking to the adjacent Fillingham Low Wood. Another line of scattered trees is proposed to the western boundary of B1 with a block of panels to the northeast of this viewpoint. This block sits adjacent to the ditch with a 50m section of proposed flower rich pollinator mix to the west up to the field boundary where this thin field strip is divided from B2 by the ditch and bounded on the west by an existing hedge.

# Shelterbelt planting

A 10m shelterbelt is proposed to the north of North Farm to mitigate views of the panels from this property and from views from the south and southeast along the PRoW.

#### **New Hedgerows**

A new hedgerow with hedgerow trees is proposed to the south of fields B2 and B3 mitigating views looking northeast from the PRoW and Willingham Road to the southwest. New hedgerows with irregular spaced hedgerows trees are proposed to the eastern boundary of field A4 and to the western boundary reaching up to the proposed scattered tree block. A new hedgerow is to cut across the southern section of field A4, creating vegetated links across this field and further mitigating potential views to the north.

#### **Existing hedgerows**

Existing hedgerows to the north of B2,3 and 4 and to the east of B4 are to be enhanced with the addition of irregularly spaced hedgerow trees and infilled as necessary. An existing gappy hedge to the south out field A2 is to be enhanced and infilled.

#### Turtle Dove mitigation

Field A3 is to be established as turtle dove habitat.

# **Grassland and Shrub Mixes**

A tall herb mix is proposed along the boundary with the ditch adjacent to field B1. Field B1 itself is to be seeded with a flower rich pollinator mix, as is a section of the A4 to the north of North Farm, taking the proposed shelterbelt a minimum of 40m to the north of the dwelling. Further flower rich mixes are proposed to the eastern

# **Operation (Year 15)**

Secondary mitigation such as planting, and grass seeding would be taken into account at this stage to include the following changes to the landscape:

This view will become significantly more enclosed and views will be of a well treed landscape with vegetated links around Fillingham Low Wood breaking up the open skyline. Close range views will comprise a flower meadow and shelterbelt with an open field of turtle dove mitigation planting to the west of North Farm. Shelterbelt planting to the north and scattered tree belt to the northeast will have established and will begin to provide strong vegetated layers across the landscape merging into existing woodland blocks with some woodland cover on the horizon. To the northeast, across several fields in the middistance, enhanced blocks of scattered trees will soften views, screen Site/Sites and will augment the level of tree cover locally, blending into the wooded horizon in places. The proposals include improvements to the hedge to the field in immediate view to break up the effects the panels might have on the skyline. The aim is to reinforce this hedgerow with trees to mitigate views from riders on the bridleway.

**Overall,** in terms of mitigation for the Cottam 1 North Site, consideration should be given to plan new tree planting around key settlements and other suitable locations such as PRoW that provide connections between these settlements. Trees should be typically grouped in small plantations/copses or as individual trees within hedgerows. The creation of new hedgerows and permanent pasture along watercourses is also a priority, enhancing visibility of steams and dykes, whilst increasing the occurrence of semi- natural habitats. Although the remaining hedgerow network in strong, there is evidence of decline, with gaps and few hedgerow trees.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and

decommissioning activities,

dust generation and site

vibration from

runoff.

**Decommissioning** 

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long



	Substation This views pint is within the 2km study area	and northern extents of this block, whilst tussock mixes abut existing and proposed hedgerows around fields A1 and A2. A 10m margin of tall herb mix is proposed	Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.	term landscape and visual effects of this mitigation.
This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.		either side of the ditch which runs south of field A1. A shrub mix is proposed to the east of Fillingham Low Wood with a tussock mix to the field boundary.	New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.	
		Adverse effects:  - Panels and structures across the landscape	Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.	
		<ul> <li>Increased hard standing areas</li> <li>Increased traffic locally</li> <li>Some minor light pollution within open countryside</li> <li>Substation, Battery storage and other associated infrastructure structures visible above existing vegetation</li> </ul>	Shrubs: 0.9m at Year 1 and 5m at Year 15.	
Magnitude	Medium	High - Medium	Low	Very Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Moderate – Major <b>Significant</b>	Moderate Significant	Minor Not Significant	Negligible <b>Not Significant</b>



Viewpoint VP36 - Fill/767/1			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint 36 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. The closest Cumulative Development to Viewpoint 36 is Tillbridge Solar, located approximately 0.8km however it is not anticipated there would be any cumulative visual effects from this viewpoint due to the intervening hedgerow directly north of the view.	
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
		Aesthetic Aspects of the Landscape  Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]	
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.	
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.	
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low	
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term	
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant	



# Viewpoint VP37 - Junction of Gypsy Lane and Willingham Road

# **Viewpoint Baseline:**

The view is located at the junction with Gypsy Lane and Willingham Road, looking east and south directly over the Cottam 1 North Site with the Cottam 1 South Site beyond to the south.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a slightly undulating, low-lying landscape within the wider context of a broad vale, which is conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop. There are some local variations in landform where the land rises to the west to a high point of approximately 20m AOD around Willingham by Stow and Kexby. To the north, the land rises to a local high point of approximately 15m AOD at Heaton's Wood and to the south there is a gentle fall towards the River Till, which takes a meandering course to the north of Normanby by Stow and to the east of Coates. Towards the east, the landform is generally flat at 10m AOD then rising gently towards the foot of the scarp slope from where the landscape then rises sharply towards the settlements of Fillingham and Ingham. In terms of enclosure, there are numerous woodland blocks that form strong geometric shapes in the landscape and collectively provide a dominant wooded horizon, particularly towards the east of the view. These woodlands include Fillingham Low Wood, New Plantation and Larch Plantation. To the west and north, the view is enclosed by the gently rising landform and the settlements, whereas to the south the landscape is more open with views extending over the River Till Vale. Towards the east the geometric woodland blocks close down some visibility. In terms of man-made features, there are isolated farmsteads at Turpin Farm, Side Farm and North Farm and there are also residential properties at Moor Bridge, otherwise little else exists in terms of built influence. Occasional groups of conifer trees have a domestic character and the overhead wires that pass along the road network are also detractors. Willingham Road is prominent in the landscape and the 'S' curve in the road (where it becomes Fillingham Lane) offers an interesting view towards the east that captures the Limestone Scarps and Dipslopes Character

<u>Subjective</u>: The viewpoint depicts a medium to large-scale, partially open landscape. In terms of variety, the combination of landscape features includes farm buildings, plantation woodland, occasional hedgerow trees, hedgerows and arable fields that present a simple, well-balanced composition. In terms of texture and colour, this is an intensively managed land use that is mainly muted but the strong presence of geometric woodlands adds some interest and sense of enclosure. Grass verges are also a feature of these local lanes that add a 'sense of place' and distinctive character, and the hedgerows have a good range of native species including hawthorn, elder, ash and dog rose. The 'S' bend in the road also adds intimacy to the landscape.

<u>Overall:</u> The view is influenced by the woodlands on the horizon towards the east that form a significant component and add balance to the landscape. This location offers some intimacy since this is a local lane with little traffic and there is no major settlement to disrupt the tranquility. The field hedgerows are cut back, and the arable land use is intensively managed, however the mature ash trees within the hedgerows are a strong feature. The overall experience is pleasant, with some depth to views and strong contrasting features due to the presence of the plantation woodlands on the horizon and the slight undulations in topography. This is an isolated, remote location with a distinct absence of settlement, built form or other manmade features

#### **Receptors:**

This viewpoint is representative of views available to walkers and horse riders travelling between the settlements of Willingham by Stow in the west and Fillingham in the east.

#### Description of Views

The foreground of the view comprises the 's' bend in the road marks the junction of Fillingham Lane and Willingham Road with large agricultural fields and hedgerows to each side. Further agricultural fields are not visible beyond since this local collection of fields has a number well-established and dense hedgerows, small woodlands, and shelterbelts. The middle and long distance therefore yields limited visibility across the agricultural fields. To the right-hand side of the view, there is the local collection of agricultural fields divided by Gypsy Lane and its tall hedgerows and to the left-hand side of the view there is a similar collection of agricultural fields that have very little extended visibility due to the presence of a good hedgerow network. The remainder of the horizon is made up of hedgerows, agricultural fields, and woodlands where visibility towards the middle and long distance is hardly evident due to the strong hedgerow network. There are some vertical elements in the view, including telegraph poles and associated cables at close range, and these are notable elements in the context of the enclosed landscape at this location.

Not Applicable



Medium



#### Value of view Sensitivity **Embedded Mitigation Receptor susceptibility to change** In terms of forces for change for VP37, small <u>Scenic:</u> There is a string of small, nucleated settlements on the Range of Features: The location comprises the local Embedded Mitigation would be taken into account at the woodlands are a distinctive component of this limestone capped scarp slope that add to the sequence of views, road network between the settlements of Willingham construction, operation (Year 1 and Year 15) and landscape. There are regular patterns of enclosure especially towards landmark churches and woodlands associated by Stow and Fillingham. This is a part open location, decommissioning stages of the Scheme. This Embedded with modern arable fields where hedgerows have with the Grade II Listed registered park and garden at Fillingham but the road follows a 'dog-leg' alignment to reflect Mitigation is also referred to as primary mitigation and would been removed, but due to the abundance of small Castle. The 'S' bends on the east west minor road network helps the field patterns and the location is part shielded by include the following measures: woodland blocks this helps reinforce a sense of with the appreciation of these views towards the scarp slope. the hedgerows that have grown tall and although enclosure in this part of the Unwooded Vales gappy in parts it helps to provide enclosure and Site boundary fencing to be set back 5m from adjacent existing Character Area 4a. The restoration of hedgerows intimacy at this location. In terms of variety, the hedgerows to allow for proposed thickening and growth. Cultural: Where the farmhouses are set back from the roads, lines therefore should be given priority to strengthen the combination of landscape features includes farm of trees such as horse chestnuts form distinctive features and field pattern and enhance linkages between buildings, plantation woodland, occasional hedgerow Panels to be set minimum of 20m from major watercourses and where the farmhouse directly front the highway they are framed woodlands. trees, hedgerows and arable fields that present a minimum of 8m from minor watercourses. to each side with oak and polar species which stand out in the simple, well-balanced composition. landscape. Conifer species are also seen with the large-scale **Overall**, the susceptibility for VP37 is conditioned by Panels to be set a minimum of 3m from Site boundaries. agricultural buildings. This characteristic is particularly noticeable the agricultural intensification and farm along Fillingham Lane and Willingham Road. Importance of View: This is a part open location on amalgamation that is resulting in the loss or damage the local road network which passes between Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged of many typical landscape features, including Willingham by Stow and Fillingham. The strategic <u>Natural:</u> The quiet rural lanes provide opportunities for wildlife traditional patterns of field boundaries, remnants of major road network is defined by important historic to grow out to add further thickening and growth to the field corridors across the area, especially where they join with minor ridge and furrow, and grasslands. The loss of grazing routes (north south) and the local road network also boundaries with the addition of new hedgerow trees as farm tracks and green lanes. fields around the edges of villages is also leading to a appropriate, randomly spaced along the length of existing links (east west) several historic and distinctive more homogenous landscape and the reinforcement settlements across the area. The viewpoint forms hedges. *Recreation and Enjoyment:* There are no PRoW and recreation is of small woodland blocks and hedgerows will help part of this east west road network. provided by numerous small country lanes. add a subtle diversity to the landscape pattern. Lighting will be limited to downlights within substations and These relevant characteristics of the landscape *Number of Receptors:* This is the local road network battery banks only and used when maintenance or security is Local Distinctiveness and Sense of Place: The 'sense of place' is therefore have a medium susceptibility to change that connects the settlements of Willingham by Stow required. Lighting will be PIR operated and will be calibrated to marked by the 'S' bend in the road, which is a distinctive feature of without undue adverse effects. and Fillingham. Being part of the east west road vehicle and personnel movements. All visible lighting would be the east west road network. network, this may extend the number of receptors 50W, installed at a maximum height of 4m with cowls fitted to from local users to those from a wider area. prevent light spillage. Lighting required within panelled areas will Health and Wellbeing: Willingham Road and Fillingham Lane is a be manually operated. There will be no lighting on perimeter quiet backwater relative to the B1241 to the west and A15 to the fencing. The visual effects **with only** the Embedded Mitigation taken into Important Spatial Function: The long eastward views to the account equate to those effects set out for the operation stage limestone capped scarp slope are key to the spatial qualities of the (Year 1) and this includes secondary mitigation which will have area. been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage. **Overall**, the value of Viewpoint VP37 is shaped by the nature of the predominantly rural and sparsely settled area with dispersed farms. The east west local network of lanes contrast with the B1241 to the west and the A15 to the east and the 'S' bends in the road helps with the appreciation of the views towards the scarp slope and the associated woodlands at Fillingham Castle.

Medium

Medium





# Viewpoint VP37 - Junction of Gypsy Lane and Willingham Road

Construction

# Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would not be fully screened due to the gappy nature of the foreground hedgerows bordering the Gypsy Lane and Willingham Road. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows within the surrounding field systems would give some partial layering, these activities would still occupy an

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

extensive proportion of the view.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate northwest of this location and the wider landscape to the northwest would also not fundamentally change.

# Construction Access

There would be no view of any construction access from this viewpoint.

# **Cable Route Corridor**

# **Operation (Year 1)**

The foreground of the view would retain the 's' bend in the road marking the junction of Fillingham Lane and Willingham Road but the large agricultural fields to each side would change to an area of panels. Further agricultural fields beyond would be screened by the panels. The local collection of agricultural fields divided by Gypsy Lane and its tall hedgerows would not change in the view. The remainder of the horizon made up of woodlands would be set in the context of the new panels to the northeast and south of this location. The vertical elements in the view, including telegraph poles and associated cables would add some minor cumulative changes to the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A scattered tree belt is proposed within field C3 to the northeast of this viewpoint linking an existing lone tree to the hedgerow to the north. Another belt links a tree in field C4 to the eastern boundary of this field.

#### **Shelterbelt**

A 5m shelterbelt is proposed to the north and west of Turnpin's Bungalows and to the south and west of Turnpin Farm to mitigate views of the Scheme from these properties. A long shelterbelt will run west/east to the north of field C5 adjacent to the existing waterway creating a strong break across this large field and adding height and variation to the views across the Site.

#### Existing hedges

Existing hedgerows along the Willingham Road are to be managed to grow out with the addition of irregularly spaced hedgerow trees as appropriate to increase the tree cover locally and provide height and further screening whilst retaining the overall character of this road.

#### New hedges

A new hedgerow to two sections of the northern boundary of field C3 are proposed where none exists mitigating views of the Site from the wider landscape to the north and joining the existing hedgerow. Further east, new field hedges to the west and east of field C9 will strengthen the field pattern locally whilst also further mitigating views from Turpin's Farm and bungalows as well as views from the east along Willingham Road. A new hedgerow to the west of field C2 will mitigate views and help to further strengthen the field structure locally, providing additional height with proposed hedgerow trees. A new hedge is proposed to the southern boundary of field C5 and the eastern boundary of C6 which will reinforce field pattern and break up the bulk of the panelled area.

#### Successional scrub

A belt of successional scrub is proposed to the western boundary of field C3 adjacent to existing vegetation on this western boundary of the Site. A strong buffer of successional scrub is proposed to run north/south and east either side of existing vegetation within fields C2,5 and 6 providing a layered visual effect and additional habitat links.

#### Grassland mixes

A 10m tall herb mix buffer is to line each side of the existing watercourse running across the Site. Elsewhere within the field boundaries, flower rich pollinator mixes are to be used with tussock mixes used adjacent to existing and proposed vegetation in places.

#### Margin verge habitat

To the north of the Willingham Road adjacent to the viewpoint, an enhanced roadside margin habitat is proposed to mitigate the erosion of good quality roadside verges in this area to create a more visually pleasing and natural view.

**Operation (Year 15)** 

grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

The view will become significantly more enclosed since the proposed scattered trees and shelterbelt will have established to create a strong field structure and screen views of the

With secondary mitigation such as planting and

and shelterbelt will have established to create a strong field structure and screen views of the panels in the mid distance. Existing hedges around the Site will have been managed to grow out to 5m reinforcing the vertical structure locally. In the close-range, the existing hedgerows will screen the panels with mid and longer distance views appearing as a layered well-treed landscape with a backdrop of local and distant woodland. Roadside verges along Willingham Road will have established to create a more natural and visually pleasing route.

Overall, in terms of mitigation for the Cottam 1 North Site, there are few public rights of way (PRoW) across the landscape and considerations should therefore be given to improving the network of local lanes for recreation. This is a landscape of long views towards the west of the power stations and towards the east of the string of settlements that line the limestone capped scarp slope and where these views are captured from the local road network then this feature should be enhanced.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

**Decommissioning** 

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.





	Viewpoint is within the 0.5km study area and there would be potential views north towards this route.  Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Growth of existing and proposed vegetation is assumed to be:  Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.
Magnitude	Medium	High	Low	Very Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Moderate <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor Not Significant	Negligible <b>Not Significant</b>



Viewpoint VP37 - Junction of Gypsy Lane and Willingham Road					
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]			
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint 37 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. It is anticipated there would be no cumulative visual effects due to extensive vegetative cover along Willingham Road which would limit any cumulative visual effects.			
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.			
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area			
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.			
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:			
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]			
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.			
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.			
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low			
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term			
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant			



# **Viewpoint VP39 - Junction of Cot Garth Lane and Stone Pit Lane**

#### **Viewpoint Baseline:**

The view is located at the junction of Cot Garth Lane and Stone Pit Lane, looking south directly over the Cottam 1 North Site with the Cottam 1 South Site beyond to the south. This is also looking east over the Cottam 1 North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a slightly undulating, low-lying landscape within the wider context of a broad vale, which is conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop. There are some local variations in landform where the land rises to the west to a high point of approximately 20m AOD at the settlement of Willingham by Stow. To the north, the land rises to a local high point of approximately 15m AOD on Fillingham Lane and to the south there is a gentle fall towards the River Till, which takes a meandering course to the north of Normanby by Stow. Towards the east, the landform is generally flat at 10m AOD then rises gently towards the foot of the scarp slope from where the landscape then rises sharply to form the scarp slope at Ingham. In terms of enclosure, there are numerous woodland blocks that form strong geometric shapes in the landscape and collectively provide a dominant wooded horizon, particularly towards the east of the view. These woodlands include New Plantation, Larch Planation, Fox Covert, Normanby Gorse and a shelterbelt at Moor Bridge. To the west and north, the view is enclosed by the gently rising landform and the settlement edge, whereas to the south the landscape is more open with views extending over the River Till Vale. Towards the east the geometric woodland blocks close down some visibility. In terms of man-made features, there are isolated farmsteads at Poplar Farm, Magin Moor Farm and Turpin Farm on Fillingham Lane and Lowfield Farm and Moor Farm on Moor Lane. There are also residential properties at Moor Bridge and Turpin's Bungalows, otherwise little else exists in terms of built influence. Stone Pit Lane is a prominent feature as it is a straight route that connects to Fillingham Lane in the north leading to a 'no through' road in the south and joining with Cot Garth Lane.

<u>Subjective:</u> The viewpoint depicts a medium-scale, partially open landscape. In terms of variety, the hedgerows are a strong feature and well cut back with regular hedgerow trees. There is also a local collection of ancient enclosure field systems to the south of Cot Garth Lane that are bounded by a strong network of hedgerows with some distinctive hedgerow trees including ash and oak. The hedgerows are present on both sides of these lanes and there are wide grass verges that present some consistency and overall intimacy to the view. In terms of texture and colour, the foreground has stockpiled materials, including tyres and hardcore, which is a detractor and mast poles are visible in the immediate foreground giving an almost garish, discordant quality and unsettling quality to the view.

<u>Overall:</u> The view is influenced by the presence of the local lane network with strong hedgerows and regular pattern of trees within them. This location offers some intimacy since this is a local lane network with little traffic and no major settlement to disrupt the tranquility. The field hedgerows are cut back, and the arable land use is intensively managed, but the presence of woodland in the distance is an interesting feature. The intensive levels of management and the stockpiling of materials add decline to the natural qualities of the view. The overall experience is pleasant as this is a quiet location with a distinct absence of settlement and disturbance.

#### **Receptors:**

This viewpoint is representative of views available to motorists, residents, walkers, and horse riders using these local lanes at the southeastern edge of Willingham by Stow.

#### **Description of View:**

The foreground of the view comprises Stone Pit Lane at the junction with Cot Garth Lane with large agricultural fields and hedgerows to each side. Further agricultural fields are not visible beyond since this local collection of fields has a number well-established and dense hedgerows with some mature trees. The middle and long distance therefore yields limited visibility across the agricultural fields. To the right-hand side of the view, there Stone Pit Lane dividing the local collection of agricultural fields and its tall hedgerows and to the left-hand side of the view there is a similar collection of agricultural fields to each side of Stone Pit Lane. The remainder of the horizon is made up of hedgerows, agricultural fields, and woodlands where visibility towards the middle and long distance is hardly evident due to the strong hedgerow network. There are some vertical elements in the view, including telegraph poles and associated cables at close range, and these are notable elements in the context of the enclosed landscape at this location.





# In terms of forces for change for VP39, the existing rural landscape features are sensitive along the network of local lanes, in particular the hedgerows since the most widespread change has been in agricultural intensification and the change from pastoral to arable cropping that has resulted in the loss of hedges, and consequently, an increase in field size. The loss of pasture is particularly evident around settlements, where grazing animals and smaller field sizes contribute to the setting and

**Receptor susceptibility to change** 

structure of several villages.

Overall, the susceptibility for VP39 is conditioned by the flat, open landscape and the loss of field structure around settlements. Whilst the aim is to plan new tree planting around key settlements, woodland does not always form a significant component of this landscape, and in considering its open and expansive character, extensive new woodland planting would be generally inappropriate. The relevant characteristics of the landscape therefore have a medium susceptibility to change without undue adverse effects. However, there is significant benefit with appropriate tree planting that could be used in and around settlements to increase the occurrence of semi-natural habitats and maintain the perception of a 'well-treed' landscape.

# Value of view

<u>Scenic:</u> The quiet rural lanes provide opportunities to experience scenic views across the area, especially where they are part of a 'back lane' system to settlements such as Stone Pit Lane.

<u>Cultural:</u> There several Grade II listed buildings within Willingham by Stow and there is a small collection of ancient enclosure fields to the south of Cot Garth Lane that give some 'time depth' to this location.

<u>Natural:</u> The junction of Cot Garth Lane and Stone Lane is a quiet backwater relative to the other local lanes and although the hedgerows are a strong feature, they are well cut back which denudes their natural character.

<u>Recreation and Enjoyment:</u> This is a landscape of long views particularly from the edges of settlements; however, views are shortened this location by the intervening landform.

<u>Local Distinctiveness and Sense of Place:</u> There are strong hedgerows present on both sides of these lanes and wide grass verges that present some consistency and distinctive qualities to the location.

<u>Health and Wellbeing:</u> The public right of way (PRoW) network is mainly located to the north of Willingham by Stow and so the appreciation of the landscape is dependent on local lanes and back lanes to the south of the settlement.

<u>Important Spatial Function:</u> Smaller settlements and their road networks provide an important spatial function, where they mainly comprise villages, farmsteads, and isolated residential dwellings.

**Overall**, the value of Viewpoint VP39 is shaped by the nature of the predominantly rural and quiet rural lanes where they join. This is in contrast with the busy B1241 and despite being so close, there is an overall calm character to this location. There are strong hedgerows to both sides of the lane that present some consistency and add to the 'sense of place'. The appreciation of the landscape is focused on these two lanes since there are no PRoW to this edge of the settlement, however the fly-tipping and stock-piled materials detract from the quality of the view.

# Sensitivity

Range of Features: The location comprises the local road network at the edge of a settlement. This is a part open location that is part shielded by the hedgerows that have grown tall and although gappy in parts it helps to provide enclosure and intimacy at this location. In terms of variety, the hedgerows are a strong feature and well cut back with regular hedgerow trees. There is also a local collection of ancient enclosure field systems to the south of Cot Garth Lane that are bounded by a strong network of hedgerows with some distinctive hedgerow trees including ash and oak.

Importance of View: This is a part open location on the local road network. This location offers some intimacy since this is a local lane network with little traffic and no major settlement to disrupt the tranquility and this raises the importance of the view.

<u>Number of Receptors</u>: This is the local road network that is likely to attract local users as opposed to visitors from a wider area.

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Site boundary fencing to be set back 5m from adjacent existing hedgerows to allow for proposed thickening and growth.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Medium

Medium

Medium

Not Appropriate





### **Viewpoint VP39 - Junction of Cot Garth Lane and Stone Pit Lane**

# Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened by the foreground hedgerows bordering Cot Garth Lane and Stone Pit Lane. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows to the foreground and within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate south, east and west of this location and in the wider landscape to the east and west would not fundamentally change.

### **Construction Access**

There would be no view of any construction access from this viewpoint.

### Cable Route Corridor

Viewpoint is outside of the 0.5km study area and there would be no view of this route.

### **Substation**

This viewpoint is within the 2km study area and there would be relatively close views of the

### **Operation (Year 1)**

The foreground of Stone Pit Lane at the junction with Cot Garth Lane would remain a feature of the view but with the large agricultural fields would change to an area of panels. Further agricultural fields beyond would be screened by the panels. The setting of Stone Pit Lane would change from a local collection of agricultural fields to be set in the context of new panels to the east side, but the existing tall hedgerows would help with screening. The remainder of the horizon is made up of woodlands would be set in the context of the new panels. The vertical elements in the view, including telegraph poles and associated cables would add some minor cumulative changes.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Shelterbelt

A shelterbelt is proposed to the southern boundary of fields G1 and G3 mitigating views across the Site to the southeast and further breaking up the Site/Sites.

### **Existing hedges**

The existing northern and western field boundaries to fields G1 and G2 require some enhancement where these are low managed hedges with limited hedgerow trees to further mitigate views from the gap in hedgerow at Stone Pit Lane. These hedges are to be allowed to grow out and managed to a height of 5m with the addition of hedgerow trees to enhance the character locally and to add further height and screening from the north and west at Stonepit Lane and from the village of Willingham by Stow.

The eastern boundary of field G4 is to be enhanced with additional tree planting and by allowing the hedgerow to grow out to a height of 5m.

Views further east of the Cottam 1 Site/Sites will also be screened by these enhanced hedgerows.

### New hedges

A new hedge is proposed to the western boundary of G4 in addition to the existing hedge on this boundary. Additional new hedge planting to the southern boundary will infill where none currently exists with the remainder of the existing hedge being enhanced as necessary.

### **Grassland mixes**

A minimum 10m buffer is to be provided around existing ditches which are to be seeded with a tall herb mix.

Flower rich pollinator mix is to be used within 10m of existing services. This is also proposed around other field boundaries which are predominantly south or west facing or relatively open.

### **Operation (Year 15)**

Secondary mitigation such as planting, and grass seeding would be taken into account at this stage to include the following changes to the landscape:

The view will become significantly more enclosed since the proposed new hedgerows will have established to create a strong field structure and screen views of the panels. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the close-range, the hedgerows will screen the panels with mid and longer distance views appearing as a layered well-treed landscape. With mid-range views there would be relatively good levels of tree cover over the local landscape but with very limited long-distance views.

Overall, in terms of mitigation for Cottam 1 North, many of the rural villages have not seen widespread expansion but development pressures continue form the commuting distance to Lincoln with the demand for housing, commerce and industry creating visual intrusion and extending settlement fringes. For development associated with the rural villages, specific mechanisms include Village Design Statements, and tree planting around settlement edges to help improve their setting in the wider landscape

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and **PRoW**
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.

### **Decommissioning**

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



	Substation at Cottam 1 beyond the panelled area in the foreground.	Elsewhere around the Site, both tussock and flower rich pollinator mixes are to be used at the base of all existing and proposed hedges around field boundaries creating a rich tapestry of vegetation.  Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Shrubs: 0.9m at Year 1 and 5m at Year 15.	
Magnitude	Medium - High	High	Medium - High	Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Major <b>Significant</b>	Moderate – Major <b>Significant</b>	Minor <b>Not Significant</b>



### **Viewpoint VP39 - Junction of Cot Garth Lane and Stone Pit Lane In-Combination Effects [Cumulative Cumulative Effects [Cumulative Developments]** Sites] In Summary In Summary The Cumulative Effects upon viewpoint 39 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing and 3b Sites, due to distance and intervening vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. Viewpoint 39 is located 1.6km to the vegetation. Therefore, there no in combination closest Cumulative Development Gate Burton Solar Site however no cumulative visual effects are anticipated due to a combination of dense hedgerow cover to the western visual effects are anticipated. side of Stone Pit Lane, built form associated with Woods Farm and the settlement of Willingham by Stow. Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area. There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility. There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures: Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9] The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area. Overall Landscape Character and Visual Amenity Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects. Construction: Very Low Operation (Year 1): Very Low No Change Magnitude Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Level of No Change Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Effect Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant **Significance** No Change Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant of Effect Operation (Year 15): Negligible **Not Significant** Decommissioning: Negligible Not Significant



### **Viewpoint VP49 - East Lane**

### **Viewpoint Baseline:**

The view is located on East Lane, looking north directly over the Cottam 2 Site with the Cottam 3b Site beyond. The view is also looking south towards the Cottam 1 North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a slightly undulating, low-lying landscape within the wider context of a broad vale, which is conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop. There are some local variations in landform where the land rises to the west (left of view) just beyond Corringham to form a narrow spur known as Windy Ridge (at Mill Farm Windmill). To the north, the land falls towards the watercourses of Corringham Beck and Aisby Beck and to the south there is a gentle rise towards the A631 and Springthorpe Road (at Corringham Windmill). The landform also rises towards the east (right of view) to the small settlement of Yawthorpe and Yawthorpe Fox Covert (rising from 18m AOD to 25m AOD). In terms of enclosure, there are very few woodland blocks or shelterbelts in the wider landscape other than Yawthorpe Fox Covert to the east and Wharton Wood towards the west. At closer proximity, there are a smaller woodland blocks, plantations and coverts around Home Farm, Ancliff Farm, Park Farm and Taskers Farm at Yawthorpe. To the north, east and south there are mainly open views and to the west the settlement of Corringham closes down the visibility. In terms of man-made features, there is only Corringham Grange Farm and The Cottage within the central part of the Site/Sites (outside the RLB), otherwise the settlement is centered on Aisby to the north, Springthorpe to the south, Corringham to the west and Yawthorpe to the east. East lane is a prominent feature particularly at the junction with Corringham Grange Farm and The Cottage access (and the track to the south of Brown's Holt).

<u>Subjective</u>: The viewpoint depicts a large-scale, exposed landscape. In terms of variety, the hedgerows are a strong feature, but well cut back with few hedgerow trees. The hedgerows are present on both sides of the lanes and there are narrow grass verges that presents a simple consistency and softer character overall. In terms of texture and colour, the hedgerows are low cut and have a highly managed appearance and little texture, and there are muted and calm tones due to the simplicity of the landscape and general absence of features. Mast poles are however prominent and in combination with the farmsteads there is some interest. The views tend to be ordinary and almost bland in the immediate context of the Site/Sites, whereas the distant horizon reveals the Limestone Scarps and Dipslopes Character Area 6a in the east comprising woodland cover at Willhoughton Cliff, Willhoughton and Hemswell.

<u>Overall:</u> The view is influenced by the presence of East Lane, which is a detractor. The location offers some interesting features locally, but with more invigorating views out towards the surrounding landscape, which is large scale and exposed. The tree cover is limited, the hedgerows are cut back, and the arable land use is intensively managed, but the presence of far-reaching views adds some stimulus. The overall experience is that of an ordinary location with an unsettled feeling due to the lack of enclosure and intimacy. There are however interesting and pleasant distant views that provide a more balanced context and feelings of calm and that detract from the unsettling nature of the immediate location.

### **Receptors:**

This viewpoint is representative of views available to walkers, horse riders, motorists and residents using these local lanes at the eastern edge of Corringham.

### **Description of View:**

The foreground of the view comprises East Lane with large agricultural fields and hedgerows beyond this. Further agricultural fields are not visible beyond since this local collection of fields has a number well-established and dense hedgerows. The middle and long distance therefore yields limited visibility across the agricultural fields. To the right-hand side of the view, there is East Lane dividing the local collection of agricultural fields with its low-cut hedgerows and to the left-hand side of the view there is a similar collection of agricultural fields to each side of East Lane. The remainder of the horizon is made up of the collection of residential dwellings comprising Corringham Grange Farm and The Cottage, hedgerows, agricultural fields, and woodlands where visibility towards the middle and long distance is hardly evident due to the strong hedgerow network. There are some vertical elements in the view, including telegraph poles and associated cables at close range, and these are notable elements in the context of the enclosed landscape at this location.





# In terms of forces for change for VP49, the open and character of the landscape is a key sensitivity particularly around the edges of settlements and tree planting can help with integration and help contribute to the overall perception of a well treed landscape from these locations. The powerful River Trent and its tributaries and other water courses within its flood plain also provide a strong functional feature running through the landscape, which contribute strongly to the 'sense of place' particular at locations adjacent to settlements where

**Receptor susceptibility to change** 

**Overall,** the susceptibility for VP49 is conditioned by the impact of settlement on the edges of the wider, flat and low-lying landscape where features are scarce. There are however also significant benefits to be gained from a range of landscape and biodiversity interventions such as tree planting and hedgerow improvement projects. The relevant characteristics of the landscape therefore have a medium susceptibility to change without undue adverse effects.

landscape features are already scarce.

### Value of view

<u>Scenic:</u> The slightly undulating, low-lying landscape is the key feature of the area, but the distant horizon reveals woodland cover at Willhoughton Cliff, Willhoughton and Hemswell

<u>Cultural:</u> There are many tranquil places along the local lanes to the north and northeast of Corringham for people to enjoy both for recreation and for local residents, but the close proximity of this location brings some noise and disturbance to the view.

<u>Natural:</u> Woodland cover is low and because of the history of the land for agriculture, the area has retained little semi-natural habitat. The hedgerows to either side of East Lane provide the main habitats for farmland species and are substitute woodland habitats that provide linkages across the landscape.

<u>Recreation and Enjoyment:</u> Recreation is provided by numerous lanes such as East Lane since there is a limited public right of way (PRoW) network in the area.

<u>Local Distinctiveness and Sense of Place:</u> This is a predominantly rural and sparsely settled area with small villages and dispersed farms. This location is in close proximity to the linear settlement of Corringham and the busy A63, which dilutes the 'sense of place' and imparts very little in terms of local distinctiveness.

<u>Health and Wellbeing:</u> The interest of this area is the network of rural lanes in combination with the watercourses, however Corringham Beck is not readily accessible to the public due to the absence of bridge crossings or 'nodes'.

<u>Important Spatial Function:</u> This area supports gently undulating and low-lying landform with low ridges dividing shallow, broad river valleys. This location however is influenced by straight roads, the close-cut hedgerows with few trees and the geometric field patterns.

**Overall,** the value of Viewpoint VP49 is shaped by an area of farmland where the hedgerow quality tends to be low due to the predominance of practices associated with arable cropping. Areas of semi-natural habitat are also very limited and fragmented due to this agricultural intensification. This location is strongly influenced by straight roads, the close-cut hedgerows with few trees and the geometric field patterns.

### Sensitivity

Range of Features: The location comprises the local road network at the edge of a settlement. This is an open location due to the low-cut hedgerows that helps to provide extended views at this location. In terms of variety, the hedgerows are a strong feature, but well cut back with few hedgerow trees. The hedgerows are present on both sides of the lanes and there are narrow grass verges that presents a simple consistency and softer character overall.

Importance of View: This is a part open location on the local road network. This location offers some recreation value since this is a local lane network but there is traffic with easy access to the A631. There being no major settlement to disrupt the tranquility, this raises the importance of the view.

<u>Number of Receptors</u>: This is the local road network that is likely to attract local users as opposed to visitors from a wider area.

### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Embedded mitigation would be taken into account at this stage to include the following measures:

Allow for panels to the east of track that leads to Corringham Grange Farm to be set back to reduce visibility from Mill Mere Road.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Site boundary fencing to be set back 5m from adjacent existing hedgerows to allow for proposed thickening and growth.

Panels to be set a minimum of 3m from Site boundaries.

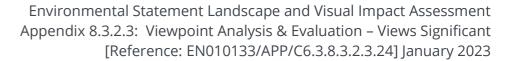
Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Medium Medium

Medium





### **Viewpoint VP49 - East Lane**

### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened by the foreground hedgerows bordering East Lane and Field Farm Lane. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows to the foreground and within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate south and west of this location and the wider landscape to the south would also not fundamentally change.

### **Construction Access**

Throughout the construction phase, this viewpoint would be affected by the construction access point off East Lane between fields H2 and H5 creating additional traffic

### **Operation (Year 1)**

The foreground of the view comprising East Lane would remain but set in the context panels instead of the large agricultural fields. The existing hedgerows would help soften the views. Further agricultural fields would be screened by the panels. The remainder of the horizon made up of the collection of residential dwellings comprising Corringham Grange Farm and The Cottage would set above the panels. The vertical elements in the view, including telegraph poles and associated cables would add some minor cumulative changes to the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Existing hedgerows

Existing hedgerows along East Lane are low cut and will be managed to grow out to a height of 5m. These will also be enhanced with irregular spaced hedgerow trees along their length to the south of the Site at Cottam 2 to create a more well-treed landscape where it currently lacks vertical structure. These enhanced hedges and trees will help to break up the views from all directions and provide visual interest and some shelter from the somewhat exposed landscape at this point. Within the Site, existing hedgelines are to be augmented with additional trees spaced intermittently with infill hedge planting as necessary to further strengthen the field pattern and break up the bulk of the panels areas. Site fencing will sit within the existing hedgerows a minimum of 5m to allow for growth.

### Shelterbelt

A 5m wide shelter belt is proposed to the western boundary of the Site further west along East Lane. This belt will screen views from the village of Corringham as well as break up the landscape to some degree. A new shelterbelt is proposed to the east of The Cottage (north of Corringham Grange Farm) screening views across the Site and further breaking up the landscape and creating some enclosure and intimacy.

### Native shrub Planting

Where an existing area of scrub with some trees to the northeast of the viewpoint exists within the proposed panelled area, this will be enhanced by native shrub planting to reinforce this feature, provide added height, and create a varied habitat. Site fencing will sit within the existing hedgerows a minimum of 5m to allow for growth.

### **New Hedging**

A native hedge with irregular spaced hedgerow trees is proposed around Corringham Grange Farm, reinforcing the character of the area, obscuring views of panels and fencing from this dwelling and will further enhance the tree and hedge cover locally to increase the overall quantity and variation of vegetation. Any more distant views of the Cottam 3a and 3b Sites will be mitigated with this intervening planting.

### **Grassland mixes**

Tussock mixes are line the base of new and existing hedges and shelterbelts as well as the proposed shrub planting to the northeast of this viewpoint with wildflower grassland mixes beneath the panels. Within the Site, adjacent to existing ditches, both flower rich pollinator mixes and tall herb mixes provide suitable habitats adjacent to these features and provide additional visual interest within the Site.

### **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

The view will become more enclosed since the new and existing hedgerows will have established and will provide a dense screen to an eventual height of 5m with hedgerow trees providing interest, form and height across the open landscape whilst areas to the south will remain more open and exposed. Shelterbelt planting to the west of the Site/Sites will have matured to create a dense buffer to this boundary. Shrub planting within the Site, although not visible from the road, will break up the panel areas and provide biodiversity benefits. The close-range views will be of dense hedgerows with hedgerow trees, whilst the mid distance will be a layered vegetated landscape with existing trees sitting above the maturing vegetation. Occasional long-distance views of blocks of woodland will be visible making up the distant horizon.

Overall, in terms of mitigation for the Cottam 2 Site, considerations should be given to planning for new tree planting around key settlements such as Corringham and other suitable locations such as local lanes that connect between these settlements. Trees should be typically grouped in small plantations/copses or as individual trees within hedgerows. The creation of new hedgerows and permanent pasture along watercourses is also a priority, enhancing visibility of streams and dykes, whilst increasing the occurrence of semi- natural habitats. Although the remaining hedgerow network is generally strong, there is nevertheless evidence of decline in a number of areas, with gaps and few hedgerow trees.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

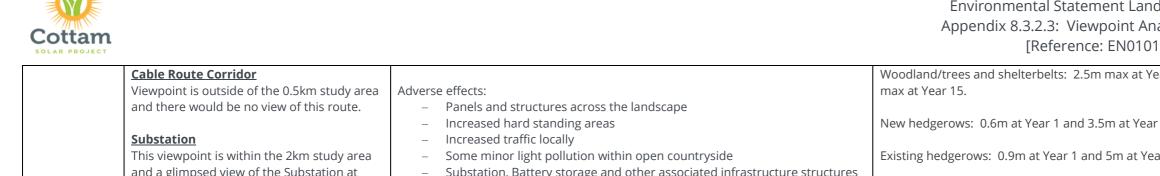
Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long





	<u>Cable Route Corridor</u>		Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m	term landscape and visual
	Viewpoint is outside of the 0.5km study area	Adverse effects:	max at Year 15.	effects of this mitigation.
	and there would be no view of this route.	<ul> <li>Panels and structures across the landscape</li> </ul>		
		<ul> <li>Increased hard standing areas</li> </ul>	New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.	
	Substation	<ul> <li>Increased traffic locally</li> </ul>		
	This viewpoint is within the 2km study area	<ul> <li>Some minor light pollution within open countryside</li> </ul>	Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.	
	and a glimpsed view of the Substation at	<ul> <li>Substation, Battery storage and other associated infrastructure structures</li> </ul>		
	Cottam 2 may be possible beyond the	visible above existing vegetation	Shrubs: 0.9m at Year 1 and 5m at Year 15.	
	panelled area.			
Magnitude	Medium	High	Medium	Very Low
Level of	A.L. 0.5L. 1.7		B. C. LO.L. T	N I O. Cl T
Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance	Moderate <b>Significant</b>	Major - Moderate <b>Significant</b>	Moderate <b>Significant</b>	Negligible <b>Not Significant</b>
of Effect				<b>5</b> 5 <b>6</b>



Viewpoint VI	P49 – East Lane	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint 49 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. The closest Development to Viewpoint 49 is Tillbridge Solar, located approximately 1.3km to the viewpoint and due to the distance, intervening field hedgerows and vegetation surrounding A631, the development will not be visible in view and therefore no cumulative visual effects are anticipated.
		approximately 1.3km to the closest Tillbridge Solar Site. Due to the distance, interveing field hedgerows and vegetation surrounding A631, the development will not be visible in view and therefore has no potential intervisibility.
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.2 [C6.4.8.15.2.2]</b> which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area.
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low
Level of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant



### Viewpoint VP56 - Pilh/20/1

### **Viewpoint Baseline:**

The view is located on PRoW, footpath Pilh/20/1, looking southeast towards the Cottam 2 Site and northeast towards the Cottam 3b Site. The view is also looking south towards the Cottam 1 North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a slightly undulating, low-lying landscape within the wider context of a broad vale, which is hardly conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop, but there are smaller pastoral fields of private planned enclosure to the south (left) of the view. There are some local variations in landform where the land rises to the west (left of view) just beyond Station Road to form a narrow spur around Todd Lane, extending from Corringham Scroggs (recreational woodland). To the north, the land rises towards Kirton Road at approximately 22m AOD and to the south there is also a gentle rise to the southwest of Glebe Farm at approximately 20m AOD. The landform also rises towards the east (right of view) towards Bonsdale Farm and the medieval village of Dunstall which rises to approximately 25m AOD. In terms of enclosure, there are very few woodland blocks or shelterbelts in the wider landscape other than Wharton Wood to the east Yawthorpe Fox Covert to the west. At closer proximity, there is some woodland around the settlement of Pilham and around Home Farm, Grebe Farm and Green Lane. The views are mainly enclosed at this location with most of the visibility extending towards the southeast. In terms of man-made features, there is only Glebe Farm, otherwise the settlement is centered on Pilham to the south.

<u>Subjective:</u> The viewpoint depicts a medium to small-scale, enclosed, and intimate landscape. In terms of variety, the hedgerows are a strong feature, with several distinctive hedgerow trees. The hedgerows are present on both sides of the footpath and the route is a green lane that presents a softer character overall. In terms of texture and colour, the hedgerows have a variety of species and are grown out in parts with an interesting texture, and there are colourful tones due to the presence of the mature trees. Mast poles are however prominent and in combination with the farmsteads there is some interest. The views tend to be pleasant and interesting in the immediate context of the Site/Sites, and the distant horizon also reveals the Limestone Scarps and Dipslopes Character Area 6a in the east comprising woodland cover at Willhoughton and Will Houghton Cliff.

Overall: The view is influenced by the skyline that is disrupted by tree clumps and mast poles. The footpath is enclosed by strong hedgerows and hedgerow trees dotted informally and with high canopies giving an open and safe feeling to the route. The existing vegetation bordering the mainline railway also occupies the background of the view and there is a dense shelterbelt vegetation which provides effective screening of Site/Sites, however the wind turbine on the Site/Sites is visible from this viewpoint. The location offers some interesting features locally, but with more invigorating views out towards the surrounding landscape, which is large scale and exposed. The overall experience is that of a very pleasant location with a strong feeling of enclosure and intimacy.

### Receptors

This viewpoint is representative of views available to walkers, motorists, and residents on the northeastern edge of Pilham.

### **Description of View:**

The foreground of the view comprises the public footpath (Pilh/20/1) with tall hedgerows and pastoral fields to each side. Further pastoral and agricultural fields are not visible beyond since this local collection of fields has a number well-established and dense hedgerows with a high number of mature trees. The middle and long distance therefore yields limited visibility across the pastoral and agricultural fields. To the right-hand side of the view, there is the local collection of pastoral fields with tall hedgerows and trees and to the left-hand side of the view there is a similar collection of fields in the context of the residential property known as Glebe Farm. The remainder of the horizon is made up of hedgerows and tree cover where visibility towards the middle and long distance is hardly evident due to the strong hedgerow network. There are some vertical elements in the view, including telegraph poles and associated cables at mid distance, but these are notable elements in the context of the wider landscape.

Not Applicable



High



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
In terms of forces for change for VP56, the rural and insettled character of the landscape is sensitive especially iround settlement fringes. Existing mature tree cover within hedgerows can however help with integration of the built form and help contribute to the overall exception of a well treed landscape. The impact on long distance views from surrounding towns and villages is also a key consideration and also the intervisibility back owards these settlements from outlying areas that offer extended view east and west.  **Deverall**, the susceptibility for VP56 is conditioned by the impact of settlement on the outlying landscape and the role that mature tree cover can play in mitigating any hanges from the Scheme. There are however significant it is specially where the hedgerow network is generally strong, but there is always evidence of decline in several treas, with gaps and potential management of hedgerow rees. The relevant characteristics of the landscape therefore have a high susceptibility to change without andue adverse effects.	Scenic: Some views from the footpaths and bridleways offer long westward views to the power stations on the River Trent, and eastward views to the scarp face of Lincoln 'Cliff'. The views are mainly enclosed at this location with most of the visibility extending towards the southeast.  **Cultural:** The area offers opportunity to create more links between settlements and the surrounding countryside since many afford wide countryside settings. This location has the benefit of surrounding medieval settlements such as Dunstall to the east of Pelham Lane.  **Natural:** Finding links between accessible sites and semi-natural habitats, especially woodlands, for use by walkers, cyclists and horse riders is important. This viewpoint has the benefit of smaller pastoral fields and a strong hedgerow network with mature trees.  **Recreation and Enjoyment:** Laughton Woods provides an area of open access land that could be better connected. The proximity of Laughton Woods is not fully evident at this location due to the enclosed nature of the view.  **Local Distinctiveness and Sense of Place:** Tranquility is associated with the winding lanes, and this creates a particular sense of place. The tranquility at this location is created by the mature tree cover and 'time depth' associated with the small field systems and strong hedgerows.  **Health and Wellbeing:** Roads and minor farm tracks that are bordered by tall hedgerows and mature trees within the setting to villages such as this, provide an overall contribution to health and well-being.  **Important Spatial Function:** The winding lanes such as Green Lane to the south contribute to spatial function.  **Overall**, the value of Viewpoint VP56 is shaped by the landscape that has a strong rural character. Recreation is provided by this footpath Pilh/20/1 which takes a route along a local lane. This is a tranquil location where features such as strong hedgerows, mature trees and smaller scale fields contribute strongly to the 'sense of place'.	Range of Features: The location comprises the public footpath network at the edge of a settlement. This is an enclosed location due to the tall and outgrown hedgerows that help to provide some intimacy at this location. In terms of variety, the hedgerows are a strong feature, with several distinctive hedgerow trees. The hedgerows are present on both sides of the footpath and the route is a green lane that presents a softer character overall.  Importance of View: This is an enclosed location on the public footpath network. There being no major settlement to disrupt the tranquility, this raises the importance of the view. The location offers some interesting features locally, but with more invigorating views out towards the surrounding landscape, which is large scale and exposed. The overall experience is that of a very pleasant location with a strong feeling of enclosure and intimacy.  Number of Receptors: This is the public footpath network that is likely to attract local users as opposed to visitors from a wider area. Overall, the footpath network is sparse in this locality, and this is an attractive route, which raises the importance of the view.	Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:  Site boundary fencing to be set back 5m from adjacent existing hedgerows to allow for proposed thickening and growth.  Panels to be set a minimum of 3m from Site boundaries.  Wildflower meadow mix to be sown beneath proposed panels.  Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.  Hedge planting to be 5m from the existing PRoW. Panels to be set back 15m from PRoW.  Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and grow to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.  Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.  The visual effects with only the Embedded Mitigation taker into account equate to those effects set out for the operatic stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physica or visual impact at this Embedded Mitigation stage.

High

High





### Viewpoint VP56 - Pilh/20/1

### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened by the foreground hedgerows bordering the public footpath. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows and mature tree cover to the foreground and within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate north, south and west of this location and the wider landscape to the west and south would also not fundamentally change.

### **Construction Access**

Throughout the construction stage, the viewpoint will be affected due to the proximity to the access point into Cottam 3b via field J1.

### **Cable Route Corridor**

Viewpoint is outside of the 0.5km study area and there would be no view of this route.

### **Substation**

This viewpoint is within the 2km study area and there may be very limited views of the Substation at Cottam 3b.

### Operation (Year 1)

The foreground of the view comprising the public footpath (Pilh/20/1) would not change but it would be set in context with the new panels to the north side. The existing tall hedgerows to each side would however screen the majority of the new panels. Further pastoral and agricultural fields are already not visible beyond and so this would not be a change to the view. To the right-hand side of the view, the local collection of pastoral fields would not be changed by the context of the panels but the similar collection of fields in the context of the residential property known as Glebe Farm would see changes to their setting by the introduction of the new panels. The vertical elements in the view, including telegraph poles and associated cables may add some minor cumulative changes.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### New hedges

A new hedge is proposed to the western boundary of field J1 where views from Glebe Farm are open to the Site of 3b. This will mitigate views from the west and, together with further hedge enhancement within the Site will strengthen the historical field pattern and character.

### Existing hedges

Existing hedges running north/south across the Site between fields J1,2,3 5 and 6 are variable and require enhancement. Infilling with new sections of hedgerow is required where these are missing and the enhancement of existing hedgerows will be achieved by managing the hedges to a height of 5m and incorporating irregularly spaced hedgerow trees to create height and further mitigate views from both the east and the west. Field boundary planting and enhancement will also break up views of the Scheme from the railway line to the north as well as enhancing the local character area. The new hedgerow to sit adjacent to the PROW will connect with the existing vegetation to the south of fields J1 and J2.

### **Grassland mixes**

A tussock grassland mix is proposed to the field boundaries and within the proposed new PRoW hedged route, creating a visually interesting and natural walk.

Further afield, any more distant views of the Cottam 2 Site and Cottam 1 Site/Sites will be mitigated by the enhanced hedgerow and tree planting along both the road and the PRoW.

## Operation (Year 15)

Secondary mitigation such as planting, and grass seeding would be taken into account at this stage to include the following changes to the landscape:

The view will become more enclosed since the proposed new hedgerows will have established to create a strong field structure and screen views of the panels. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the close-range, the new and enhanced hedgerows will screen the panels with mid and longer distance views appearing as a layered well-treed landscape with a mid-range view of the railway line vegetation. There are no long-distance views.

**Overall,** in terms of mitigation for the Cottam 3b Site, consideration should be given to enhanced planting along the road and public footpath and bridleway networks particularly at the gateways to settlements, whilst respecting the long views both towards the east and the west across the area. This planting will also enhance the visitor experience particularly where in close proximity to the AGLV at Laughton Forest. The planting could be adopted both along the unnamed roads and the strategic road network to provide a more varied and interesting landscape and enhance the feeling of travelling from open to more enclosed areas.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.

Shrubs: 0.9m at Year 1 and 5m at Year 15.

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

**Decommissioning** 

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be



SOLAR PROJECT	[Reference: ENOTOTOS/ATT/Co.S.O.S.Z.S.Z_A] NOVEMBER 2025				
		Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation		balanced out by the long term landscape and visual effects of this mitigation.	
Magnitude	Medium	High	Medium	Very Low	
Level of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term	
Significance of Effect	Moderate-Major <b>Significant</b>	Major <b>Significant</b>	Moderate Significant	Negligible <b>Not Significant</b>	



	In Combination Effocts [Cumulative Sites]	Cumulativo Effects (Cumulativo Developments)
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	<u>In Summary</u>	In Summary
	There would be no intervisibility between the Cottam 1 Site, or Cottam 2 Sites, due to distance and intervening vegetation. Therefore, there no in combination visual effects are anticipated.	The Cumulative Effects upon viewpoint 56 of the Cumulative Developments is Minor at year 1 of operation and Minor at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and
	There would be no intervisibility between the Cottam 2 and Cottam 3a and 3b Sites due to distance, the intervening settlement of Aisby, and additional intervening hedgerows and tree cover. The intervening vegetation along the mainline railway would also provide additional screening and separation between the Cottam 2 Site and Cottam 3a Site.	Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects.  The closest Development to Viewpoint 56 is Tillbridge Solar, located approximately 3.2km to the viewpoint and due to built form associated with Pilham and Corringham combined no cumulative visual effects are anticipated.
	Between the Cottam 3b and Cottam 3a Sites, the changes would not be readily noticeable. In the context of the Cottam 3b Site, the Cottam 3a Site occupies only a very small portion of the view due to the intervening vegetation along the mainline railway and foreground hedgerows and tree cover and would not result in no change to the view's composition. There would be a small change to existing landscape	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	elements beyond the railway line by the addition of the area of panels in place of an airfield at the Cottam 3a Site, but the detectable impacts do not alter the baseline of the receptor materially.	There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.2 [C6.4.8.15.2.2] which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character of the Unwooded Vales  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area.
	Construction: Low-Medium	Construction: Low
Magnitude	Operation (Year 1): Low-Medium Operation (Year 1): with only Embedded Mitigation: Low-Medium Operation (Year 15): Low-Medium Decommissioning: Low-Medium	Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
	Construction: Adverse & Short Term	Construction: Adverse & Short Term
Level of	Operation (Year 1): Adverse & Long Term	Operation (Year 1): Adverse & Long Term
	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Effect	Operation (Year 15): Beneficial & Long Term	Operation (Year 15): Beneficial & Long Term
	Decommissioning: Neutral & Short Term	Decommissioning: Neutral & Short Term
	Construction: Minor-Moderate Not Significant	Construction: Minor Not Significant
Significance	Operation (Year 1): Minor-Moderate <b>Not Significant</b>	Operation (Year 1): Minor <b>Not Significant</b>
of Effect	Operation (Year 1): with only Embedded Mitigation: Minor-Moderate Not Significant	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant
7. 27.000	Operation (Year 15): Minor-Moderate <b>Not Significant</b> Decommissioning: Minor-Moderate <b>Not Significant</b>	Operation (Year 15): Minor <b>Not Significant</b> Decommissioning: Minor <b>Not Significant</b>
	Decommissioning, willor-woderate wot significant	Decommissioning, Million Not Significant



### Viewpoint VP58 - Junction of Pilh/20/1 and Bonsdale Lane

### **Viewpoint Baseline:**

The view is located on PRoW, footpath Pilh/20/1 at the junction with Bonsdale Lane, looking west directly over the Cottam 3b Site and northwest towards the Cottam 3a Site. The view is also looking south towards the Cottam 2 Site with Cottam 1 North Site beyond.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a very slightly undulating, low-lying landscape within the wider context of a broad vale, which is conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop. There are some local variations in landform where the land rises to the west just beyond Station Road and Pilham to form a narrow spur around Todd Lane, extending from Corringham Scroggs (recreational woodland). To the north, the land rises towards Kirton Road at approximately 22m AOD and to the south there is also a gentle rise to the southwest of Glebe Farm at approximately 20m AOD. The landform also rises towards the east (right of view) towards Bonsdale Farm and the medieval village of Dunstall which rises to approximately 25m AOD. In terms of enclosure, there are very few woodland blocks or shelterbelts in the wider landscape other than Wharton Wood to the east Yawthorpe Fox Covert to the west. At closer proximity, there is some woodland around the settlement of Pilham and around Bonsdale Farm, Southorpe Farm, Home Farm, Glebe Farm and Green Lane. The views are mainly open at this location with most of the visibility extending towards the west, south and east. In terms of man-made features, there is Bonsdale Farm and the mainline railway and Blyton Level Crossing.

<u>Subjective</u>: The viewpoint depicts a medium to large-scale, open, and balanced landscape. In terms of variety, the hedgerows are a strong feature, with several distinctive hedgerow trees and there is also woodland cover to the east side of the lane at Bonsdale Farm, which extends as a feature from the ancient enclosure field systems and the deserted village of Dunstall. The hedgerows on both sides of Bonsdale Lane are low-cut allowing open and expansive views towards the south. In terms of texture and colour, the vegetation along the railway line supports a wider variety of species than the low-cut hedgerows and is grown out in parts with an interesting texture, and there are also colourful tones due to the presence of the mature trees and woodland at Bonsdale Farm. Mast poles are however prominent. The views tend to be pleasant and interesting in the immediate context of the Site/Sites, and the distant horizon also reveals the Limestone Scarps and Dipslopes Character Area 6a in the east comprising woodland cover at Willhoughton Cliff. There are also extended views towards Laughton Common showing a wooded horizon, which forms part of the Wooded Vales Character Area 4a.

Overall: The view is influenced by the open nature of the location. Bonsdale Lane is defined by strong hedgerows and hedgerow trees dotted informally and with the adjoining woodlands and shelterbelt at Bonsdale Farm this gives a comfortable and pleasant feeling to the location. The existing vegetation bordering the mainline railway also occupies the background of the view and there is a dense shelterbelt vegetation within the field systems to the north of the railway lines, which provides effective screening in this direction. The wind turbine on the Site/Sites is visible from this viewpoint. The location offers some interesting features locally, but with more invigorating views out towards the surrounding landscape, which is open and exposed. The overall experience is that of a very pleasant location with a strong feeling of vigour and inspiration.

### Receptors

This viewpoint is representative of views available to walkers, motorists, and residents using the PRoW and Bonsdale Lane on the eastern edge of Pilham.

### **Description of View:**

The foreground of the view comprises the public footpath at the junction with Bonsdale Lane with a large flat arable field in the foreground and hedgerows to each side. Further agricultural fields are not visible beyond since this local collection of fields has several well-established and dense hedgerows with a high proportion of mature trees and the landscape is flat. The middle and long distance therefore only yields visibility across the agricultural fields towards the distant backdrop of Laughton Wood. To the right-hand side of the view, there is Bonsdale Lane with the local collection of agricultural fields to each side and extended views towards the Blyton Level Crossing. To the left-hand side of the view there is a similar collection of fields divided by Bonsdale Lane with extended views across an open and expansive landscape. The remainder of the horizon is made up of farm buildings, hedgerows, and tree cover where visibility towards the middle and long distance is hardly evident due to the strong hedgerow network and shelterbelts. There are some vertical elements in the view, including telegraph poles and associated cables at close range, and these are notable elements in the context of their close proximity.





### **Receptor susceptibility to change**

In terms of forces for change for VP58, the small woodlands are a key feature of this part of the Unwooded Vales Character Area 4a. Objectives should ensure that restoration and extension of existing woodland and new planting schemes take full advantage of opportunities to enhance the visual relationship with the scarp slope in the adjoining Limestone Scarps and Dipslopes Character Area 6a. The pressures are therefore centered around existing woodlands that are often small and isolated and suffer from lack of management. Pressure from arable cultivation has also resulted in field enlargement, removing field boundaries, and creating a more open landscape.

**Overall,** the susceptibility for VP58 is conditioned by the escarpment, known locally as the Lincolnshire Edge or Cliff, that rises above the Trent Vale and forms a prominent and distinctive landscape feature in some views from this part of the Unwooded Vales Character Area 4a. The road systems are also a key consideration with the north south axis of the Roman roads being less dominant but nonetheless distinctive pattern of east west routes and field boundaries that add geometric character are important features. The relevant characteristics of the landscape therefore have a high susceptibility to change without undue adverse effects.

### Value of view

<u>Scenic:</u> It is an area that shows a north south local road network as a feature of this small part of the Unwooded Vales Character Area 4a. Elsewhere, the routes are typically east-west aligned to reflect the historic connections across the Vale between the Trent floodplain and the limestone capped scarp slope in the

<u>Cultural:</u> The strong relationship with the River Trent provides a dynamic landscape with a rich network of history and ancient enclosure associated with the medieval village of Dunstall to the east of Bonsdale Farm.

<u>Natural:</u> There is scope to build upon existing areas that hold significant wildlife value and explore potential to create new habitats. The strong linear shelterbelt to the west of Bonsdale Farm provides scope for improvement and habitat connectivity.

<u>Recreation and Enjoyment:</u> Senses of intimacy and comfort are likely to be associated with this location due to the presence of the strong shelterbelt to the west of Bonsdale Farm and the vegetation along the mainline railway.

<u>Local Distinctiveness and Sense of Place:</u> There are some local variations in landform and strong belts of tree at Bonsdale Farm and along the mainline railway. These features hold a positive value when defining the 'sense of place'.

<u>Health and Wellbeing:</u> The sense of enjoyment that helps promote health and wellbeing stems from these local lanes, especially where they connect with the PRoW network, such as footpath Pilh/20/1.

Important Spatial Function: The spatial function is provided by the medium to large-scale open landscape that is interspersed with strong woodland blocks and shelterbelts.

**Overall**, the value of Viewpoint VP58 is shaped by the north south local road networks that departs from the typical eastwest alignment within the Unwooded Vales Character Area 4a. There is a rich network of history to this location and ancient enclosure associated with the medieval village of Dunstall. These features hold positive value when defining 'sense of place'.

### Sensitivity

Range of Features: The location comprises the public footpath network at the edge of a settlement that connects with the network of local lanes. This is an open location due to the hedgerows that are well cut back, which helps to provide extended views towards the south and east. In terms of variety, the hedgerows are a strong feature, with several distinctive hedgerow trees and there is also woodland cover to the east side of the lane at Bonsdale Farm, which extends as a strong feature from the ancient enclosure field systems and the deserted village of Dunstall.

Importance of View: This is an open location on the public footpath network where it joins with the local road network. There being no major settlement to disrupt the tranquility, this raises the importance of the view. The views tend to be pleasant and interesting, and the distant horizon also reveals the Limestone Scarps and Dipslopes Character Area 6a in the east comprising woodland cover at Willhoughton and Willhoughton Cliff. There are also extended views towards Laughton Common showing a wooded horizon, which forms part of the Wooded Vales Character Area 4a.

<u>Number of Receptors</u>: This is the public footpath network that is likely to attract local users. Overall, the footpath network is sparse in this locality, and this is an attractive route, which raises the importance of the view.

### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Site boundary fencing to be set back 5m from adjacent existing hedgerows to allow for proposed thickening and growth.

Panels to be set a minimum of 3m from Site boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Hedge planting to be 5m from the existing PRoW. Panels to be set back 15m from PRoW.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

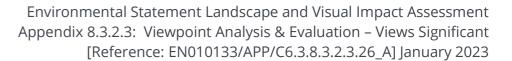
Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

High

Medium

**Medium to High** 





### Viewpoint VP58 - Junction of Pilh/20/1 and Bonsdale Lane

### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened by the foreground hedgerows bordering Green Lane and Pilham Lane. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows to the foreground and within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate north, south and east of this location and the wider landscape to the east and south would also not fundamentally change.

### **Construction Access**

There would be no view of any construction access from this viewpoint.

### **Cable Route Corridor**

### **Operation (Year 1)**

The foreground of the view would retain the public footpath at the junction with Bonsdale Lane, but the large arable field would change to panels. The hedgerows to each side would however help with screening in the foreground. Further agricultural fields are already not visible beyond and so this situation would not change, and the distant backdrop of Laughton Wood would remain. Bonsdale Lane with the local collection of agricultural fields to each side and extended views towards the Blyton Level Crossing would remain but in the context of new panels to the left of the view but set behind the exiting hedgerow. The remainder of the horizon is made up of tree cover and shelterbelts would remain visible above the new panels. The vertical elements in the view, including telegraph poles and associated cables would add some minor cumulative change to the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Shelterbelt

A shelterbelt is proposed to part of the the northern boundary of field J6, creating a strong structure to this field boundary and further height to the local landscape.

### Existing hedges

Existing hedges within the Site, are to be enhanced, being allowed to grow out and managed at 5m whilst new tree planting will create visual interest and height along these boundaries. Enhancement will further mitigate views into the Site from the Bonsdale Lane and the PRoW. Where the unnamed road meets the PRoW (footpath), the existing hedgerow is very low with no hedgerow trees. It is to be allowed to grow out and to be enhanced with the addition of irregularly spaced native tree species along the western boundary of the unmade road to break up the rather bleak landscape at this point. The existing hedgerow to the south of the PRoW is also devoid of trees and creates very little interest to either road users on this road or to pedestrians using the PRoW network. The existing route offers an open, inhospitable walk likely to be cold and windy at times. Tree cover and hedges managed to a greater height will provide relief from the elements and create a more varied visual experience.

### New hedges

At present the existing route of the PRoW heading west from this viewpoint is exposed and somewhat windswept. A new hedge with hedgerow trees is proposed to the north of the PRoW on the southern boundaries of fields J1, 2, 3 and 6 creating a much more enclosed and intimate walk, whilst also mitigating views of the Scheme from the south, southwest and southeast. Hedges are spaced to create a wide walkway of 10m. New hedges are proposed running north/south where existing hedgelines are degraded, breaking up the overall site and strengthening the character of the existing field pattern.

### Successional scrub

Successional scrub is to the planted to the northern boundaries of fields J1,2,3 and 5 at the base of the existing vegetation along the railway line, creating both visual and ecological benefit with low maintenance planting.

### **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

The view will become more enclosed since the proposed new hedgerows will have established to create a strong field structure and screen views of the panels. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the close-range, the new and enhanced hedgerows will screen the panels with mid and longer distance views appearing as a layered well-treed landscape. There is also a mid-range view of the railway line vegetation and a backdrop of strong woodland features at Laughton Woods to some views with more distant horizons of woodland and hedgerow trees.

**Overall,** in terms of mitigation for the Cottam 3b Site, consideration could be given to enhanced planting along the road networks at the gateways to settlements, whilst enhancing the long views both towards the east and the west across the area. This planting will also enhance the visitor experience particularly where on route to the AGLV at Laughton Forest to the northwest of this location. The planting could be adopted both along the unnamed roads and the strategic road network to provide a more varied and interesting landscape to highlight the changes when travelling from open to more enclosed areas. These local lanes are less busy and the more tranquil, since they are less accessible than the east west routes that are intrinsically linked. These lanes offer many locations to capture views across the landscape and show significant potential to develop sustainable mitigation strategies.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Decommissioning

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain longterm improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical



	Viewpoint is within the 0.5km study area and there would be minor views to the southwest of this route.  Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 2 or 3a and 3b beyond the proposed panelled area.	Grassland mixes  A tussock grassland mix is proposed to the field boundaries and within the proposed new PRoW hedged route, creating a visually interesting and natural walk.  Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.
Magnitude	Medium	High	Medium	Very Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Adverse & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Negligible <b>Not Significant</b>



Viewpoint VF	P58 – Junction of Pilh/20/1 and Bonsdale Lane	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	In Summary  There would be no intervisibility between the Cottam 3b Site, Cottam 1 Site/Sites and Cottam 2 Site, due to distance, the intervening settlements of Aisby, Corringham and Yawthorpe and additional intervening hedgerows and tree cover.	In Summary The Cumulative Effects upon viewpoint 58 of the Cumulative Developments is Minor at year 1 of operation and Minor at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. The closest Cumulative Development to Viewpoint 58 is Tillbridge Solar, located approximately 3.6km from the view and no cumulative visual effects are anticipated due to proximity.
	Between the Cottam 3b and 3a Sites, the changes would not be readily noticeable. In the context of the Cottam 3b Site, the Cottam 3a Site occupies only a very small portion of the view due to the intervening vegetation along the mainline railway and foreground hedgerows and tree cover and would not result in a highly noticeable change to the view's composition. There would be a small change to existing landscape elements beyond the railway line by the addition of the area of panels in place of an airfield at the Cottam 3a Site, but the visually detectable impacts do not alter the baseline of the receptor materially.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area.  Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3s and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.  There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and
		Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
Magnitude	Construction: Low-Medium Operation (Year 1): Low-Medium Operation (Year 1): with only Embedded Mitigation: Low-Medium Operation (Year 15): Low-Medium Decommissioning: Low-Medium	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
Type of Effect	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Beneficial & Short Term	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Construction: Minor-Moderate Not Significant	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant



### **Viewpoint VP59 - Blyton Level Crossing**

### **Viewpoint Baseline:**

The view is located on Blyton Level Crossing, looking southwest directly over the Cottam 3b Site and northwest over the Cottam 3a Site. The view is also looking south towards the Cottam 2 Site with the Cottam 1 North Site beyond.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a very slightly undulating, low-lying landscape within the wider context of a broad vale, which is very conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop. There are some local variations in landform where the land rises to the west just beyond Station Road and Pilham to form a narrow spur around Todd Lane, extending from Corringham Scroggs (recreational woodland). To the north, the land rises towards Kirton Road at approximately 22m AOD and to the south there is also a gentle rise to the southwest of Glebe Farm at approximately 20m AOD. The landform also rises towards the east (right of view) towards Bonsdale Farm and the medieval village of Dunstall which rises to approximately 25m AOD. In terms of enclosure, there are very few woodland blocks or shelterbelts in the wider landscape other than Wharton Wood to the east and Yawthorpe Fox Covert to the west. At closer proximity, there is some woodland around the settlement of Pilham and around Bonsdale Farm, Southorpe Farm, Home Farm, Glebe Farm and Green Lane. The views are mainly open at this location with most of the visibility extending towards the west, south and east. In terms of man-made features, there is Bonsdale Farm to the south, Top Farm to the west and Southorpe Farm to the northeast, and the mainline railway and Blyton Level Crossing bring strong urban influences.

<u>Subjective:</u> The viewpoint depicts a medium to large-scale, open, and balanced landscape. In terms of variety, the hedgerows are a strong feature, with several distinctive hedgerow trees and there is also woodland cover to the east side of the lane at Bonsdale Farm and north side of the railway at Southorpe Farm. There is also a strong line of mature tree and scrub cover along both sides of the mainline railway and further strong hedgerows and tree cover within the small collection of fields to the northeast of Top Farm. The hedgerows are on both sides of the unnamed road and are low-cut allowing open and expansive views towards the south. In terms of texture and colour, the vegetation along the railway supports a wider variety of species than the low-cut hedgerows and is grown out in parts with an interesting texture, and there are also colourful tones due to the presence of the mature trees and woodland at Bonsdale Farm. Mast poles are however prominent. The views tend to be pleasant and interesting in the immediate context of the Site/Sites, and the distant horizon also reveals the Limestone Scarps and Dipslopes Character Area 6a in the east comprising woodland cover at Willhoughton and Willhoughton Cliff. There are also extended views towards Laughton Common showing a wooded horizon, which forms part of the Wooded Vales Character Area 4a.

Overall: The view is influenced by the open nature of the location. The unnamed road is defined by strong hedgerows and hedgerow trees dotted informally and with the adjoining woodlands and shelterbelt at Bonsdale Farm this gives a comfortable and pleasant feeling to the route. The existing vegetation bordering the mainline railway also occupies the majority of the view and there is dense shelterbelt vegetation between the field systems to the north of the railway line which provides effective screening in this direction. The wind turbine on the Site/Sites is visible from this viewpoint. The viewpoint offers some interesting but detracting features locally, that are evident in sharp contrast with the more invigorating views out towards the surrounding landscape, which is open and exposed. The overall experience is that of a pleasant location with strong feelings of vigour and inspiration. The railway line is discordant in this otherwise balanced landscape.

### **Receptors:**

This viewpoint is representative of views available to walkers, motorists using the unnamed road network to the eastern edge of Pilham, and train passengers on the mainline railway.

### **Description of View:**

The foreground of the view comprises the Blyton Level Crossing and mainline railway within the context of a large flat arable field in the foreground and hedgerows to each side. Further agricultural fields are only just visible beyond since this local collection of fields has a number well-established and dense hedgerows with a high proportion of mature trees and the landscape is flat. The middle and long distance therefore yields some visibility across the agricultural fields towards the distant backdrop of Laughton Wood. To the right-hand side of the view, there is Bonsdale Lane as it crosses the Blyton Level Crossing and where there is a small woodland copse. To the left-hand side of the view there is a similar collection of fields divided by Bonsdale Lane with extended views across an open and expansive landscape. The remainder of the horizon is made up of the dense vegetation to each side of the mainline railway, farm buildings, hedgerows, and tree cover. There are some vertical elements in the view, including the mainline railway infrastructure, telegraph poles and associated cables at close range, and these are notable elements in the context of their close proximity to the receptor.



Medium



In terms of forces for change for VP59, the flat, featureless topography of the area, specifically lack of hedgerows and the implications of agricultural intensification are evident. Improvements to dykes and embankments as a result of intensive agriculture are also a key force for change. Fast growing energy crops are also creating an impact on the landscape. There are aims to manage the diversification of farms which look to provide attractions and accommodation. Farm amalgamation and agricultural intensification should be carefully managed to maintain rural character.

Overall, the susceptibility for VP59 is conditioned by Need to enhance the small woodland blocks, which are generally sparse but features of the area. The aim should be to avoid large areas of woodland planting since unless carefully sited, this new planting can introduce inappropriate and visually intrusive elements in the flat and open landscape. The proliferation of new large scale agricultural buildings and general increase in farm size can introduce visual intrusions and may be difficult to mitigate due to the sparse woodland cover and conditions over planting. The relevant characteristics of the landscape therefore have a medium susceptibility to change without undue adverse effects.

### Value of view

<u>Scenic:</u> Despite the influence of the level crossing, the area has a peaceful nature and has managed to retain a relatively remote and undeveloped character, giving the landscape an impression of naturalness.

<u>Cultural</u>: There is also a strong line of mature trees and scrub cover along both sides of the mainline railway and further strong hedgerows and tree cover within the small collection of fields to the northeast of Top Farm. This tree cover pays recognition to the cultural pressures around the mainline railway and changes to the landscape.

*Natural:* The hedgerows are on both sides of the unnamed road are low-cut with few natural qualities.

<u>Recreation and Enjoyment</u>: The adjoining woodlands and shelterbelt at Bonsdale Farm gives a comfortable and pleasant feeling to this location. The level crossing contributes to the sense of enjoyment of the landscape.

<u>Local Distinctiveness and Sense of Place</u>: There are springs and flushes at the edges of the limestone plateau where the water meets the underlying impermeable layers. Many flushes are evident by their riparian vegetation and the River Eau provides this context in the landscape to the north of Dunstall.

<u>Health and Wellbeing:</u> The landscape supports a peaceful, undisturbed rural character despite the proximity to the mainline railway.

<u>Important Spatial Function:</u> The area supports north south aligned local roads (that gain access to a number of former medieval settlements) and which are popular for informal recreation.

**Overall**, the value of Viewpoint VP59 is shaped by the presence of the mainline railway and Blyton Level Crossing that contributes to the enjoyment of the landscape. The area also supports north south aligned local roads (that gain access to a number of former medieval settlements) and which are popular for informal recreation.

Medium

### Sensitivity

Range of Features: The location comprises the local road network where it crosses the mainline railway at the edge of a settlement. This is an open location due to the hedgerows that are well cut back, which helps to provide extended views towards the south and east. In terms of variety, the hedgerows are a strong feature, with several distinctive hedgerow trees and there is also woodland cover to the east side of the lane at Bonsdale Farm and north side of the railway at Southorpe Farm.

Importance of View: This is an open location on the local road network. The views tend to be pleasant and interesting, and the distant horizon also reveals the Limestone Scarps and Dipslopes Character Area 6a in the east comprising woodland cover at Willhoughton and Willhoughton Cliff. There are also extended views towards Laughton Common showing a wooded horizon, which forms part of the Wooded Vales Character Area 4a. There is also a strong line of mature tree and scrub cover along both sides of the mainline railway and further strong hedgerows and tree cover within the small collection of fields to the northeast of Top Farm.

Number of Receptors: This is the local road network that attracts local users but is likely to attract users from the wider area. Overall, this is an attractive route, which raises the importance of the view.

Medium

### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Reinforce hedgerow on eastern boundary of the Cottam 3b Site. Reinforce hedgerow by gapping it up and allowing for it to grow out especially in northeastern boundary corner.

Introduce hedgerow trees to the boundary to mitigate views from the railway and the unnamed road.

The proposed boundary fence is set 5m from the railway line with scrub planting keeping large trees away from this feature for maintenance purposes.

The panels are to be set 5m from the railway line and underplanted with a wildflower grassland mix.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Site boundary fencing to be set back 5m from adjacent existing hedgerows to allow for proposed thickening and growth.

Panels to be set a minimum of 3m from Site boundaries.

Not Applicable

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.





### **Viewpoint VP59 - Blyton Level Crossing**

Construction

# Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened by the foreground hedgerows bordering Pilham Lane. During the latter part of the construction stage, views would become available of the elevated activities,

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

and although the hedgerows to the

proportion of the view.

foreground and within the surrounding field

these activities would still occupy an extensive

systems would give some partial layering,

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate north, east and south of this location and the wider landscape to the east would also not fundamentally change.

### **Construction Access**

There would be no view of any construction access from this viewpoint.

### **Cable Route Corridor**

Viewpoint is outside of the 0.5km study area and there would be no view of this route.

### **Substation**

### Operation (Year 1)

The foreground of the view comprising the Blyton Level Crossing and mainline railway would be set within the context of new panels instead of a large arable field which would add a small cumulative change to the view. Further agricultural fields just visible beyond would also be screened by the new panels, but the distant backdrop of Laughton Wood would remain. The setting of Bonsdale Lane as it crosses the Blyton Level Crossing and where there is a small woodland copse would not change. The remainder of the horizon made up of the dense vegetation to each side of the mainline railway, and tree cover would be evident above the new panels. The vertical elements in the view, including the mainline railway infrastructure, telegraph poles and associated cables would add minor cumulative changes to the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### **Shelterbelt**

A shelter belt is to be planted, running east/west between Areas 1 and 3 of the Cottam 3b Site to the west.

### Existing hedges

Existing hedgerows along this unnamed road will be enhanced and infilled, with intermittent hedgerow trees, adding to height and interest, and will be allowed to grow out to a height of 5m. A grass tussock mix will run to the base on this hedgerow creating a varied and layered habitat. These enhanced hedgerows will run the length of the eastern boundary of the Site along the unnamed road.

Several existing hedgerows divide the Site into smaller rectilinear fields and these boundaries will be enhanced with infill planting as necessary, intermittent tree planting along their existing lines and where no hedgerows exist, new hedgerows will help to further delineate the field boundaries, create a stronger field pattern, and break up the overall bulk of the paneled area.

Views northwest towards the Cottam 3a Site will be mitigated by enhanced tree and hedge planting to the north of Kirton Road, reducing longer distance views across the Site.

### New hedges

A proposed native hedgerow including irregular hedgerow tees is to be planted to the eastern extent of this field boundary to enhance the existing native hedgerow and break up the bulk of panels within this area. This will provide further screening from the northeast and the south.

### <u>Successional scrub</u>

Proposed successional scrub planting along the northern boundary of the Cottam 3b Site and adjacent to the railway line will augment the existing lines of vegetation and help soften views into the Site from both the railway and the unnamed road which heads towards Aisby.

### **Grassland mixes**

### **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

The view will become more enclosed since the scene will be a relatively well treed one with existing hedges having grown out to some extent and proposed hedges with hedgerow trees having established and begun to mature. The overall character will be retained whilst views of detracting features such as the railway line and overhead cables being predominantly obscured from most views. Views to the south, north and east will remain open whilst views further to the north and west will be enhanced through limited and appropriate additional characteristic planting.

**Overall**, in terms of mitigation for the Cottam 3b Site, consideration could be given to new tree planting around key settlements and other suitable locations that provide linkages between these settlements. Trees should be typically grouped in small plantations/copses or as individual trees within hedgerows. The creation of new hedgerows and permanent pasture along watercourses is also a priority, enhancing visibility of streams and dykes, whilst increasing the occurrence of semi- natural habitats. Although the remaining hedgerow network is generally strong, there is nevertheless evidence of decline in a number of areas, with gaps and few hedgerow trees. The distinctive open character of the landscape is also an important consideration. Priority should also be given to managing more characteristic habitats, such as dykes and drainage ditches, and the planting of natural vegetation in these locations.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.

### Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local



	This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 2 and 3a and 3b.	Tussock mixes are proposed to all field boundaries and wildflower grassland mix beneath panelled areas will create a varied and biodiverse series of habitats for a large range of species and provide visual interest where minor views into the Site exist.  Adverse effects:  Panels and structures across the landscape Increased hard standing areas Increased traffic locally Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Shrubs: 0.9m at Year 1 and 5m at Year 15.	area, all of which will benefit visual receptors.  With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.
Magnitude	Medium	High	Medium	Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Significance of Effect	Moderate <b>Significant</b>	Moderate-Major <b>Significant</b>	Moderate <b>Significant</b>	Minor Not Significant



	P59 - Blyton Level Crossing	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	<u>In Summary</u>	<u>In Summary</u>
	There would be no intervisibility between the Cottam 3b Site, Cottam 1, due to distance.	The Cumulative Effects upon viewpoint 59 of the Cumulative Developments is Minor at year 1 of operation and Minor at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and
	Between the Cottam 3b and 3a Sites, the changes would not be readily noticeable. In the context of the Cottam 3b Site, the Cottam 3a Site occupies only a very small portion of the view due to the intervening vegetation along the mainline railway and foreground hedgerows and tree cover and would not result in	Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. The closest Cumulative Development to Viewpoint 59 is Tillbridge Solar, located approximately 4.3km from the view therefore no cumulative visual effects are anticipated due to proximity.
	a highly noticeable change to the view's composition. There would be a small change to existing landscape elements beyond the railway line by the addition of the area of panels in place of an airfield at the Cottam 3a Site, but the visually detectable impacts do not alter the baseline of the receptor	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character
	materially.	area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area.
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
	Construction: Low-Medium	Construction: Low
Magnitude	Operation (Year 1): Low-Medium Operation (Year 1): with only Embedded Mitigation: Low-Medium Operation (Year 15): Low-Medium	Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low
	Decommissioning: Low-Medium	Decommissioning: Low
	Construction: Adverse & Short Term	Construction: Adverse & Short Term
Level of	Operation (Year 1): Adverse & Long Term	Operation (Year 1): Adverse & Long Term
Effect	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
	Operation (Year 15): Beneficial & Long Term Decommissioning: Beneficial & Short Term	Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
	Construction: Minor-Moderate <b>Not Significant</b>	Construction: Minor <b>Not Significant</b>
C:: E:	Operation (Year 1): Minor-Moderate <b>Not Significant</b>	Operation (Year 1): Minor <b>Not Significant</b>
Significance	Operation (Year 1): with only Embedded Mitigation: Minor-Moderate Not Significant	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant
of Effect	Operation (Year 15): Minor-Moderate <b>Not Significant</b>	Operation (Year 15): Minor <b>Not Significant</b>
	Decommissioning: Minor-Moderate <b>Not Significant</b>	Decommissioning: Minor <b>Not Significant</b>



### Viewpoint VP60 - B1025 (Kirton Road)

### **Viewpoint Baseline:**

The view is located on the B1025 (Kirton Road) at the entrance to the Blyton Park Driving Centre, looking northwest directly over the Cottam 3a Site and southwest towards the Cottam 3b Site, with the Cottam 2 Site beyond.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a very slightly undulating, plateau landscape within the wider context of a broad vale, which is very conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop but with former airfields on these plateau locations. Beyond the plateau there are some local variations in landform where the land falls to the west just beyond the A159 at Laughton Common and Laughton Woods (recreational woodland). To the north, the land rises towards Scotton at approximately 20m AOD, but there are also small variations in landform between to take account of several watercourses including Northorpe Beck and its tributaries. To the south the landform extends from the plateau as generally flat until there is a gentle rise to the settlement of Aisby at approximately 20m AOD. The landform also rises towards the east (right of view) towards Northorpe and Northorpe Hall at approximately 25m AOD. The landform then continues to rise in the east towards the limestone capped scarp slope where the settlement of Kirton in Lindsay occupies higher elevation at approximately 60m AOD. In terms of enclosure, there are several woodland blocks or shelterbelts in the wider landscape including woodland at Northorpe and Northorpe Hall to the east and the expansive Laughton Woods to the west and north of the Site/Sites. To the south, the vegetation along the mainline railway and the tall shelterbelts in the field systems to the northeast of Top Farm are the prominent feature. The woodland associated with the burial site to the north of the Site/Sites also closes down views in this direction. At closer proximity, there is some woodland around the settlement of Blyton and around Blyton Grange Farm, Top Farm and Southorpe Farm which adds some enclosure. The views are mainly open at this location with most of the visibility extending towards the west, north and east, with limited visibility to the south. I

<u>Subjective:</u> The viewpoint depicts a large-scale, expansive, and open landscape. In terms of variety, the Blyton Park Driving Centre is the main feature and the low-cut hedgerows along the Kirton Road frontage allow open visibility across the landscape in all directions. There is a strong line of mature tree and scrub cover along both sides of the mainline railway and further strong hedgerows and tree cover within the small collection of fields to the northeast of Top Farm, which is a distinctive feature to the south side of Kirton Road. In terms of texture and colour, the vegetation along the railway supports a wider variety of species than the low-cut hedgerows and is grown out in parts with an interesting texture on the skyline, and there are also colourful tones due to the presence of the Blyton Park Driving Centre. Masts, poles, and wind turbines on the Site/Sites are also prominent. The views tend to be bland and unsettling in the immediate context of the Site/Sites due the open exposed context and the discordant uses within the airfield. The distant horizon however reveals extended views towards Laughton Common showing a wooded horizon, which forms part of the Wooded Vales Character Area 4a.

Overall: The view is influenced by the open nature of the location and the presence of the Blyton Park Driving Centre and its associated hanger, access roads and parking areas. Although Kirton Road is defined by strong hedgerows they are low-cut and the hedgerow trees are weak and this gives an uncomfortable feeling to the route, especially given that it is a long straight road with fast moving traffic and no footways, with only narrow grass verges. The existing vegetation bordering the mainline railway is the appealing feature of the view along with the dense shelterbelt vegetation between the field systems which provides effective screening in this direction. The wind turbine on the Site/Sites is prominent from this viewpoint, but the low scrub in the foreground helps to mitigate its presence. The viewpoint offers some interesting but highly detracting features locally, that are evident in sharp contrast to the more invigorating views out towards the surrounding landscape of Laughton Woods and Laughton Common as a strong wooded horizon. The overall experience is that of an unsettling location with overwhelming feelings of insecurity. The distant electricity pylons and the sporadic buildings, signage and gateway fencing in the foreground also add to the discordancy and uncomfortable nature of the view.

### **Receptors:**

This viewpoint is representative of views available to motorists and cyclists travelling along Kirton Road between the settlements of Blyton in the west and Northorpe in the east.

### **Description of View:**

The foreground of the view comprises a large flat agricultural field within the context of the Blyton Park Racing Centre, which lies beyond and a foreground hedgerow. Further agricultural fields are only just visible beyond this since the landscape is flat and this local collection of fields are expansive and vast. The middle and long distance therefore yields extended visibility across these agricultural fields towards the distant backdrop of Laughton Wood. To the right-hand side of the view, there is Kirton Road as it heads towards the junction with Bonsdale Lane where there is a small woodland copse. To the left-hand side of the view there is a similar collection of fields divided by Kirton Lane with extended views towards the settlement of Blyton. The remainder of the horizon is made up of large-scale arable fields mixed with smaller fields of pasture where hedgerows are well established, and the mainline vegetation is also a key feature. There are some vertical elements in the view, including the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables, but these are not notable elements due to the abundance of tree cover associated with the mainline railway and small-scale field systems.





### **Receptor susceptibility to change**

In terms of forces for change for V60, there are aims to protect existing rural landscape features, in particular the restoration of hedgerows since the most widespread change has been in agricultural intensification and the change from pastoral to arable cropping that has resulted in the loss of hedges, and consequently, an increase in field size. The loss of pasture is particularly evident around settlements, where grazing animals and smaller field sizes contribute to the setting and structure of several villages.

**Overall,** the susceptibility for VP60 is conditioned by the flat, open landscape and whilst the aim is to plan new tree planting around key settlements, woodland does not form a significant component of this landscape, and in considering its open and expansive character, extensive new woodland planting would be generally inappropriate. However, there is significant benefit with appropriate tree planting that could be used in and around settlements to increase the occurrence of semi-natural habitats and maintain the perception of a 'well-treed' landscape. The relevant characteristics of the landscape therefore have a medium to low ability to accommodate change without undue adverse effects.

Medium

### Value of view

Medium

<u>Scenic:</u> Clear views are a key feature of the area. The views are mainly open at this location with most of the visibility extending towards the west, north and east, with limited visibility to the south.

<u>Cultural:</u> The wider landscape setting of the settlements promotes the importance of the landscape and form strong visual relationships between adjoining Area of Greater Landscape Value (AGLV). This is particularly evident at Blyton where the north-western edge creates strong relationships with Laughton Woods.

<u>Natural:</u> The views tend to be bland and unsettling in the immediate context of the Site/Sites due the open exposed context and the discordant uses within the airfield, which detract from the natural qualities of the landscape.

<u>Recreation and Enjoyment:</u> The Blyton Park Driving Centre is the key recreational resource, but its relationship with the landscape setting of Blyton is marred by the discordant uses.

<u>Local Distinctiveness and Sense of Place:</u> The lack of individual field boundary oak/ash trees is a key feature of the location. Even the relatively nondescript occasional trees seen in isolation make a crucial contribution to local landscape character.

<u>Health and Wellbeing:</u> The villages within the Scarps and Dipslopes Character Area 6a at the crest of the scarp slope such as Blyborough, Willoughton and Hemswell benefit from attractive settings due to the presence of woodland cover associated with the historic halls and associated parklands. Whereas the settlements such as Blyton are influenced by the former airfields and busy road networks in the Wooded Vales Character Area 4b.

<u>Important Spatial Function:</u> There are different landscape patterns that typify the differing landscape character and its contribution to spatial function, and this is particularly noticeable where the baseline views change dramatically between the south and the northeastern extents of the Site/Sites.

**Overall**, the value of Viewpoint VP60 is shaped by the airbase that is prominent along Kirton Road. The airbase contributes little to surrounding landscape character and the landscape setting of Blyton is also influenced by their presence. There is a noticeable difference where the baseline views change dramatically between the south and the northeastern extents of the Site/Sites. Clear views are a key feature of the area.

### **Sensitivity**

Range of Features: The location comprises the local road network where passes by a local recreation facility at the edge of a settlement. This is an open location due to the hedgerows that are well cut back, which helps to provide extended views. In terms of variety, the Blyton Park Driving Centre is the main feature and the low-cut hedgerows along the Kirton Road frontage allow open visibility across the landscape in all directions. There is a strong line of mature tree and scrub cover along both sides of the mainline railway and further strong hedgerows and tree cover within the small collection of fields to the northeast of Top Farm, which is a distinctive feature to the south side of Kirton Road.

Importance of View: This is an open location on the local road network. The views tend to be discordant, and the distant horizon hardly reveals the Limestone Scarps and Dipslopes Character Area 6a.

Number of Receptors: This is the local road network that attracts local users but is also likely to attract users from the wider area due to the presence of the Blyton Park Driving Centre. Overall, this is an ordinary location, which dilutes the importance of the view.

### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Site boundary fencing to be set back 5m from adjacent existing hedgerows to allow for proposed thickening and growth.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Site boundary fencing to be set back 5m from adjacent existing hedgerows to allow for proposed thickening and growth.

Panels to be set a minimum of 3m from Site boundaries.

Wildflower meadow mix to be sown beneath proposed panels.

Hedge planting to be 10m from the existing PRoW.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Medium





### **Viewpoint VP60 - B1025 (Kirton Road)**

### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened by the foreground hedgerows bordering Kirton Road. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows to the foreground and within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the airfield land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate south, east and west of this location and the wider landscape to the east would also not fundamentally change.

### **Construction Access**

All throughout the construction stage the viewpoint will be affected due to Kirton Road B1205 having 2 points of access into the Cottam 3a Site/Sites. The first access point is through Kirton Road as it connects to fields K3 and K4. The second access point is through Kirton Road as it connects to field K12. These two access points will make Kirton Road busy during the construction stages and will affect the view.

### **Cable Route Corridor**

### **Operation (Year 1)**

The foreground of the view would change from a large flat agricultural field to an area of panels and within the context of the Blyton Park Racing Centre, that would add minor cumulative changes to the view. Further agricultural fields beyond would also be screened by the new panels but the distant backdrop of Laughton Wood would remain. The setting of Kirton Road as it heads towards the junction with Bonsdale Lane where there is a small woodland copse would also be set in the context of the new panels. The mainline railway vegetation is also a key feature of the view, but its setting would not be directly affected by the new panels. The vertical elements in the view, including the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables would add minor cumulative changes to the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Existing hedges

The existing hedge to the south of field K12 is to be enhanced and allowed to grow out and managed to a height of 5m. Additional tree planting is proposed along this hedgeline creating a natural screen and additional height to this area and mitigating views into the Site to the west from this viewpoint and the Kirton Road. This buffer also acts to mitigate views of the whole Site of 3a from views from the south and is to be further enhanced with successional scrub.

### Successional Scrub:

A 10m wide buffer of successional scrub is proposed between the existing hedgerow to be enhanced and the development on the southern extents of field K12, further enhancing the ecological value, visual interest and screening value of this southern boundary of the Site.

### New hedges

New hedging to the west of the driving centre track will mitigate views into the Site as well as breaking up the landscape when viewed from the south. Hedgerow trees will provide height and interest to this area. A new hedge is to run the length of the northern boundary of field K7 where none exists, breaking up the overall landscape and the bulk of the developed area whilst retaining the character. These proposed hedgerows will reinforce the historical field pattern and create a more varied landscape at this point where boundaries have been degraded to create the airfield landscape. New hedgerows the eastern boundaries of fields K8 and K9 will reinforce the vegetation and tree cover locally and break up views across the airfield landscape.

### Turtle Dove mitigation

Turtle Dove habitat is proposed to the west of Blyton Park entrance in field K12, where an existing hedgerow exists to the southern boundary and some additional trees to the east.

### **Grassland mixes**

A mix of Tussock grass and flower rich pollinator mixes are to be used around the boundaries of the fields with wildflower meadow mix beneath the panelled areas and under existing overhead power lines.

### Adverse effects:

### **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

The view will become more enclosed since the proposed new hedgerows will have established to create a strong field structure and screen views of the panels. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the close-range context, the hedgerows will screen the panels with mid and longer distance views appearing as a layered, relatively well-treed landscape around the airfield with a backdrop of strong woodland features at Laughton Woods to the north west.

Overall, in terms of mitigation for the Cottam 3a Site, consideration should take account that many of the rural villages have not seen widespread expansion but development pressures continue within commuting distance of Lincoln with the demand for housing, commerce and industry creating visual intrusion and extending the urban fringe. For development associated with the rural villages, specific mechanisms include Village Design Statements, and tree planting around settlement fringes to help integrate new development into the landscape.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.

of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are

those arising from

activities for the duration

of the decommissioning

noise and vibration from

including site traffic,

decommissioning

generation and site

activities, dust

runoff.

Following

**Decommissioning** 

A similar process to that

decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to

retain grass margins to

preserve some varied

land use and maintain

long-term improvements

in biodiversity in the local

benefit visual receptors.

area, all of which will





	Viewpoint is outside of the 0.5km study area on the outer extents and there may be limited views to the southwest of this route.  Substation This viewpoint is within the 2km study area and there are potential views of the Cottam 3a substation to the northwest.	<ul> <li>Panels and structures across the landscape</li> <li>Increased hard standing areas</li> <li>Increased traffic locally</li> <li>Some minor light pollution within open countryside</li> <li>Substation, Battery storage and other associated infrastructure structures visible above existing vegetation</li> </ul>	Shrubs: 0.9m at Year 1 and 5m at Year 15.	With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.
Magnitude	High	High	Medium	Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Moderate Significant	Minor <b>Not Significant</b>



Viewpoint VP60 – B1025 (Kirton Road)				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary  There would be no intervisibility between the Cottam 3a Site, Cottam 1 or Cottam 2 due to proximity.  The changes between the Cottam 3a and 3b Sites, would not be readily noticeable. In the context of the Cottam 3a Site, the Cottam 3b Site occupies only a very small portion of the view due to the intervening vegetation along the mainline railway, the foreground hedgerows and tree cover and the intervening-built form at Top Farm and Grange farm and would not result in a highly noticeable change to the view's composition. There would be a small change to existing landscape elements beyond the railway line by the addition of the area of panels in place of the arable fields at the Cottam 3b Site, but the visually detectable impacts do not alter the baseline of the receptor materially.	The Cumulative Effects upon viewpoint 60 of the Cumulative Developments is Minor at year 1 of operation and Minor at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. The closest Cumulative Development to Viewpoint 59 is Tillbridge Solar, located approximately 4.7km from the view therefore no cumulative visual effects are anticipated due to proximity.  Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area.  Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.  There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]  Overall Landscape Character and Visual Amenity Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.		
Magnitude	Construction: Low-Medium Operation (Year 1): Low-Medium Operation (Year 1): with only Embedded Mitigation: Low-Medium Operation (Year 15): Low-Medium Decommissioning: Low-Medium	Alter the overall character of the landscape within the Unwooded Vales Character Area 4a.  Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low		
Level of Effect	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Beneficial & Short Term	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	Construction: Minor-Moderate <b>Not Significant</b> Operation (Year 1): Minor-Moderate <b>Not Significant</b> Operation (Year 1): with only Embedded Mitigation: Minor-Moderate <b>Not Significant</b> Operation (Year 15): Minor-Moderate <b>Not Significant</b> Decommissioning: Minor-Moderate <b>Not Significant</b>	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant		



### **Viewpoint VP61 - B1025 (Kirton Road)**

### **Viewpoint Baseline:**

The view is located on the B1025 (Kirton Road) to the west of the Blyton Park Driving Centre, looking directly west over the Cottam 3a Site and southwest towards the Cottam 3b Site with the Cottam 2b Site beyond.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a very slightly undulating, plateau landscape within the wider context of a broad vale, which is very conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop but with former airfields on these plateau locations. Beyond the plateau there are some local variations in landform where the land falls to the west just beyond the A159 at Laughton Common and Laughton Woods (recreational woodland). To the north, the land rises towards Scotton at approximately 20m AOD, but there are also small variations in landform between to take account of several watercourses including Northorpe Beck and its tributaries. To the south the landform extends from the plateau as generally flat until there is a gentle rise to the settlement of Aisby at approximately 20m AOD. The landform also rises towards the east (right of view) towards Northorpe and Northorpe Hall at approximately 25m AOD. The landform then continues to rise in the east towards the limestone capped scarp slope where the settlement of Kirton in Lindsay occupies higher elevation at approximately 60m AOD. In terms of enclosure, there are several woodland blocks or shelterbelts in the wider landscape including woodland at Northorpe and Northorpe Hall to the east and the expansive Laughton Woods to the west and north of the Site/Sites. To the south, the vegetation along the mainline railway and the tall shelterbelts in the field systems to the northeast of Top Farm are the prominent feature. The woodland associated with the burial site to the north of the Site/Sites also closes down views in this direction. At closer proximity, there is some woodland around the settlement of Blyton and around Blyton Grange Farm, Top Farm and Southorpe Farm which adds some enclosure. The views are mainly open at this location with most of the visibility extending towards the west, north and east, with limited visibility to the south. I

<u>Subjective:</u> The viewpoint depicts a large-scale, expansive, and open landscape. In terms of variety, the Blyton Park Driving Centre is the main feature and the low-cut hedgerows along the Kirton Road frontage allow open visibility across the landscape, except for the immediate southwest where a small thicket at the 'S' bend in the road closes down views. There is a strong line of mature tree and scrub cover along both sides of the mainline railway, which is a strong feature to the south side of Kirton Road. In terms of texture and colour, the vegetation along the railway supports a wider variety of species than the low-cut hedgerows and is grown out in parts with an interesting texture on the skyline, and there are also colourful tones due to the presence of the Blyton Park Driving Centre. Masts, poles, and wind turbines on the Site/Sites are also prominent. The views tend to be interesting and pleasant in the immediate context of the Site/Sites due the open exposed context, the presence of the adjacent thicket on both sides of the road and the extended views towards the east. The distant horizon reveals extended views towards the west comprising Laughton Woods and Laughton Common showing a wooded horizon, which forms part of the Wooded Vales Character Area 4a. There are also extended views towards the east that capture an open and attractive arable landscape with strong hedgerows and tree cover and little in the way of built influence.

Overall: The view is influenced by the open nature of the location and although the presence of the Blyton Park Driving Centre is a detractor, the extended views towards the east and the west are the overriding feature. Kirton Road (at this section) continues to be defined by strong hedgerows that are low-cut but there is a marked contrast since the hedgerow trees are stronger with some tree clumps. This strong tree cover gives a more comfortable feeling to the route at this location, especially given that the road is winding, with notable tussocky grass verges. The existing vegetation bordering the mainline railway remains the appealing feature of the view. The wind turbine on the Site/Sites, the hanger and other masts and poles are prominent from this viewpoint, but the tree, scrub and hedgerow cover in the foreground helps to mitigate their presence. The viewpoint offers some interesting features locally, that are evident in the context of the more invigorating views out towards the surrounding landscape of Laughton Woods and Laughton Common. The clusters of deciduous woodland to the northeast of the Site/Sites are also an appealing feature. The overall experience is that of an interesting location with overwhelming feelings of vigour due to the pleasant outlook in all directions and the balance and harmony of this arable landscape.

### Receptors

This viewpoint is representative of views available to motorists and cyclists travelling along Kirton Road between the settlements of Blyton in the west and Northorpe in the east.

### **Description of View:**

The foreground of the view comprises a large flat agricultural field within the context of the Blyton Park Racing Centre, which lies beyond and a foreground hedgerow. Further agricultural fields are visible beyond this since the landscape is flat and this local collection of fields are expansive and vast. The middle and long distance therefore yields extended visibility across these agricultural fields towards the distant backdrop of Laughton Wood. To the right-hand side of the view, there is Kirton Road as it winds towards Northorpe where there is groups and individual trees along its verges. To the left-hand side of the view there is a similar small group of trees divided by Kirton Lane as it makes a small turn and closes down visibility in this direction. The remainder of the horizon is made up of large-scale arable fields where hedgerows are well established. There are vertical elements in the view, including power lines, the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables, and these are notable elements due to the locally open nature of this location.





### **Receptor susceptibility to change**

In terms of forces for change for VP61, the small woodland blocks and copses are a significant component of the landscape, and the aim should be to protect their distinctive character and how they relate to the landscape context of the settlements. The restoration of hedgerows should also be given priority to strengthen the field pattern and enhance linkages between these small woodland blocks. The impact on the setting of village churches is also particularly important as these are distinctive local landmarks. There are regular patterns of enclosure and modern arable fields where hedgerows have been removed, but due to the abundance of large woodland blocks this helps reinforce a sense of enclosure.

**Overall,** the susceptibility for VP61 is conditioned by the agricultural intensification and farm amalgamation that is resulting in the loss or damage of many typical landscape features, including small woodland blocks, traditional patterns of field boundaries, remnants of ridge and furrow, and grasslands. The loss of grazing fields around the edges of villages is also leading to a more homogenous landscape. The relevant characteristics of the landscape therefore have a medium susceptibility to change without undue adverse effects.

### Value of view

<u>Scenic:</u> Clear views are a key feature of the area. The distant horizon reveals extended views towards the west comprising Laughton Woods and Laughton Common showing a wooded horizon, which forms part of the Wooded Vales Character Area 4a. There are also extended views towards the east that capture an open and attractive arable landscape with strong hedgerows and tree cover and little in the way of built influence.

<u>Cultural:</u> The wider landscape setting of the settlements promote the importance of the landscape and form strong visual relationships with landscape to the east of the area around Northorpe.

<u>Natural:</u> This strong tree cover gives a more comfortable feeling to the route at this location, especially given that the road is winding, with notable tussocky grass verges.

<u>Recreation and Enjoyment:</u> The view is influenced by the open nature of the location and although the presence of the Blyton Park Driving Centre is a detractor, the extended views towards the east and the west are the overriding feature, which enhance the enjoyment of the landscape.

<u>Local Distinctiveness and Sense of Place:</u> There are colourful tones due to the presence of the Blyton Park Driving Centre and masts, poles and wind turbines on the Site/Sites are also prominent. The 'sense of place' is created by the slight bend and the small covert that marks this location.

<u>Health and Wellbeing:</u> There are several woodland blocks or shelterbelts in the wider landscape including woodland at Northorpe and Northorpe Hall to the east and the expansive Laughton Woods to the west and north enhance the feelings of well-being.

<u>Important Spatial Function:</u> The baseline views change dramatically between the south and the northeastern extents of the Site/Sites. At this location the view is influenced by the strong east west visibility.

**Overall**, the value of Viewpoint VP61 is shaped by the airbase, but there is a noticeable difference where the baseline views change dramatically between the south and the northeastern extents of the Site/Sites. Clear views are a key feature of this location that extend both east and west. There are also extended views towards the north that capture an open and attractive arable landscape with strong hedgerows and tree cover and little in the way of built influence.

### Sensitivity

Range of Features: The location comprises the local road network where passes by a local recreation facility at the edge of a settlement. This is a part open location due to the hedgerows that are well cut back, which helps to provide extended views, but the small woodland to the south helps to add some interest to this location. In terms of variety, the Blyton Park Driving Centre is the main feature and the low-cut hedgerows along the Kirton Road frontage allow open visibility across the landscape, except for the immediate southwest where a small thicket at the 'S 'bend in the road closes down views. There is a strong line of mature tree and scrub cover along both sides of the mainline railway, which is a strong feature to the south side of Kirton Road.

Importance of View: This is a part open location on the local road network. The views tend to be attractive (but discordant where they capture the features at the Blyton Park Driving Centre). The distant horizon reveals the Limestone Scarps and Dipslopes Character Area 6a which adds interest to the view.

Number of Receptors: This is the local road network that attracts local users but is also likely to attract users from the wider area due to the presence of the Blyton Park Driving Centre. Overall, this is a fairly attractive location, which raises the importance of the view.

### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Existing overhead cables to have a 10m buffer to be planted with a flower-rich pollinator mix.

Open views across the relatively well treed non-wooded farmland will be retained to the east, south and north.

Site boundary fencing to be set back 5m from adjacent existing hedgerows to allow for proposed thickening and growth.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

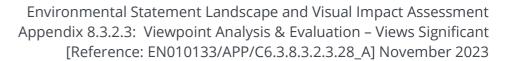
Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Medium

Medium

Medium





### **Viewpoint VP61 - B1025 (Kirton Road)**

### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened by the foreground hedgerows bordering Kirton Road. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows to the foreground and within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the airfield land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate north, south and east of this location and the wider landscape to the east would also not fundamentally change.

### **Construction Access**

This viewpoint would be affected by two access points into Cottam 3a and 3b off the Kirton Road. One into Blyton Park Racetrack (field K12) and one into field K3/K4.

### **Cable Route Corridor**

Viewpoint is outside of the 0.5km study area and there would be no view of this route.

### Operation (Year 1)

The foreground of the view would change from a large agricultural field to an area of panels, and within the context of the Blyton Park Racing Centre that would add minor cumulative changes to the view. Further agricultural fields beyond would be screened from view by the panels and the distant backdrop of Laughton Wood may be lost. The setting of Kirton Road as it winds towards Northorpe with groups and individual trees along its verges would not be directly affected by the new panels. The similar small group of trees divided by Kirton Lane as it makes a small turn would however be affected by the presence of the new panels. The vertical elements in the view, including power lines, the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables would add minor cumulative changes to the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Existing hedges

Existing low-cut hedges to the north, south and east of this field to be augmented with additional hedge planting and irregularly spaced hedgerow trees with the existing hedges allowed to grow out to a height of 5m. The further enclosure of this field will provide valuable screening to the Site beyond to the west, whilst providing a relatively intimate area for turtle dove and other species. Existing views of the Blyton Park Driving Centre and wind turbines will be obscured from view. The existing hedge to the east of the Blyton Park circuit to be allowed to grow out to provide additional screening across the Site and provide ecological benefits through the Site with wide margins of tussock mix adjacent to this hedge and buildings to the south. The existing hedge to the east of the Blyton Park circuit to be allowed to grow out to provide additional screening across the Site and provide ecological benefits through the Site with wide margins of tussock mix adjacent to this hedge and buildings to the south. Existing and proposed hedgerows and trees will help mitigate views to the west from Kirton Road when travelling north/south.

### Turtle Dove mitigation

At this point, Field K18 (eastern part), which forms the closest view to the Site, turtle dove mitigation planting is proposed with early feeding resources to provide a suitable habitat with no panels within this field area, retaining an open field with panels set some 200m to the west. Looking to the southwest of this view, additional turtle dove habitat will be created to the west of the Site entrance to Blyton Park where the openness of the landscape will be retained but where more outgrown hedgerows exist towards the junction with the road to Aisby.

### Successional Scrub

Planting to the east of field K18 to include a strong buffer of enhanced hedgerow planting with irregularly spaced hedgerow trees as well as successional scrub planting to the west of this boundary within the Site. Views into the Site from further north along Kirton Road will be screened as will other prominent structures when looking to the west. The road will be somewhat more enclosed in nature with outgrown and additional planting but will retain open views to the east. The existing hedge to the east of the Blyton Park circuit to be allowed to grow out to provide additional screening across the Site and provide ecological benefits through the Site with wide margins of tussock mix adjacent to this hedge and buildings to the south.

### Operation (Year 15)

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

Views south towards the Cottam 3b Site and Cottam 2 Site are predominantly screened from this viewpoint by existing dense planting on and around the Aisby junction with further vegetation along the railway line acting as an additional buffer and therefore no further mitigation is required at this point.

For the Cottam 3a Site, views to the west of the Site will be screened in the close-range through the planting of the enhancement of existing hedges which will be managed to a height of 5m. In the middle distance, new and augmented hedgerows will provide a series of good quality boundaries both formally strengthening the existing and historical field pattern and creating a multi-layered landscape. Views of the longer distance, (were hedgerows to not block these), will be of a layered, well treed landscape with a backdrop of wooded vegetation in places on the horizon. Both new and existing vegetation will have established and begun to mature creating a strong structure to the landscape and reducing the exposed feel of the area whilst retaining its overall character.

Overall, with the Cottam 3a Site, consideration could be given to place tree cover in the most suitable locations in and around settlements to help create a mixed pattern of land use. Consideration should also be given to the management of existing trees and small woodland blocks, enhancing their biodiversity value and age structure through new planting and the creation of woodland edge habitats. An increase in grassland reversion should also be encouraged, increasing the occurrence of semi-natural habitats.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Decommissioning

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.



Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.2.3: Viewpoint Analysis & Evaluation – Views Significant [Reference: EN010133/APP/C6.3.8.3.2.3.28\_A] November 2023

	Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 3a and 3b.	Grassland mixes Tall herb mixes are proposed 10m either side of existing ditches with flower rich pollinator mix to be planted under existing service cables and around the western field boundary to field K17. Elsewhere, within the eastern part of the Cottam 3a Site a tussock mix is proposed around existing and proposed hedgerows.  Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.
Magnitude	Medium	High	Low	Very Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Moderate <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor Not Significant	Negligible Not Significant



Viewpoint VP61 – B1025 (Kirton Road)				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary	In Summary		
	There would be no intervisibility between the Cottam 3b Site, Cottam 1, due to distance.  Visual changes would not be readily noticeable between the Cottam 3a and 3b Sites. In the context of the Cottam 3a Site, the Cottam 3b Site occupies only a very small portion of the view due to the	The Cumulative Effects upon viewpoint 61 of the Cumulative Developments is Minor at year 1 of operation and Minor at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. The closest Cumulative Development to Viewpoint 59 is Tillbridge Solar, located approximately 4.7km from the view therefore no		
	intervening vegetation along the mainline railway, the foreground hedgerows and tree cover and the intervening-built form at Top Farm and Grange farm and would not result in a change to the view's composition. There would be a small change to existing landscape elements beyond the railway line by the addition of the area of panels in place of the arable fields at the Cottam 3b Site, but the detectable impacts do not alter the baseline of the receptor materially.	cumulative visual effects are anticipated due to proximity.  Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area.		
		Aesthetic Aspects of the Landscape  Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]		
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.		
	Construction: Low-Medium	Construction: Low		
Magnitude	Operation (Year 1): Low-Medium Operation (Year 1): with only Embedded Mitigation: Low-Medium Operation (Year 15): Low-Medium Decommissioning: Low-Medium	Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low		
Level of Effect	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	Construction: Minor-Moderate Not Significant Operation (Year 1): Minor-Moderate Not Significant Operation (Year 1): with only Embedded Mitigation: Minor-Moderate Not Significant Operation (Year 15): Minor-Moderate Not Significant Decommissioning: Minor-Moderate Not Significant	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant		



### **Viewpoint VP62 - B1025 (Kirton Road)**

### **Viewpoint Baseline:**

The view is located on the B1025 (Kirton Road) just east of the junction with Station Road, looking northeast towards the Cottam 3a Site and southwest towards the Cottam 3b Site. The view is also looking south towards the Cottam 2 Site with the Cottam 1 North Site beyond.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a very slightly undulating, plateau landscape within the wider context of a broad vale, which is not that conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop but with former airfields on these plateau locations and the settlement of Blyton to the west. Beyond the plateau there are some local variations in landform where the land falls to the west just beyond the A159 at Laughton Common and Laughton Woods (recreational woodland). To the north, the land rises towards Scotton at approximately 20m AOD, but there are also small variations in landform between to take account of several watercourses including Northorpe Beck and its tributaries. To the south the landform extends from the plateau as generally flat until there is a gentle rise to the settlement of Aisby at approximately 20m AOD. The landform also rises towards the east (right of view) towards Northorpe and Northorpe Hall at approximately 25m AOD. The landform then continues to rise in the east towards the limestone capped scarp slope where the settlement of Kirton in Lindsay occupies higher elevation at approximately 60m AOD. In terms of enclosure, there are several woodland blocks or shelterbelts in the wider landscape including woodland at Northorpe and Northorpe Hall to the east and horthorpe thall to the east and north of the Site/Sites. To the south, the vegetation along the mainline railway and the tall shelterbelts in the field systems to the northeast of Top Farm are the prominent feature. The woodland associated with the burial site to the north of the Site/Sites also closes down views in this direction. At closer proximity, there is some woodland around the settlement of Blyton and associated tree and woodland cover. In terms of manmade features, the residential properties of Blyton have a significan

<u>Subjective</u>: The viewpoint depicts a medium-scale, partially open landscape. In terms of variety, the residential properties are the main feature and the low-cut hedgerows along the Kirton Road frontage allow open visibility across the landscape towards the east and southeast. There is a strong line of mature tree and scrub cover along both sides of the mainline railway but the further hedgerows and tree cover within the small collection of fields to the northeast of Top Farm fall below the horizon. In terms of texture and colour, the vegetation along the railway supports a wider variety of species than the low-cut hedgerows and is grown out in parts with an interesting texture on the skyline, and there are also colourful tones due to the presence of the residential properties of Blyton. Masts, poles, and electricity pylons are also prominent features. The views are interesting and pleasant in the immediate context of the Site/Sites due the open context and the extended views along Kirton Road that show a strong visual relationship between the green heart (internal field systems) of Blyton to the east of the war memorial.

Overall: The view is influenced by the open nature of the location and the visual relationship between the heart of the settlement at the war memorial and this location. Although Kirton Road is defined by strong hedgerows, they are low-cut, but the hedgerow trees are strong and this gives some visual comfort to the route (given that it is a long straight road with fast moving traffic and no footways, with only narrow grass verges). The existing vegetation bordering the mainline railway is the appealing feature of the view along with the views to the heart of the settlement. The small woodland block to the west boundary of the Site/Sites is prominent from this viewpoint on the horizon and the nearby conifer shelter belt just falls below the horizon behind the intervening hedgerows. The viewpoint offers some interesting and attractive features locally, including intervisibility between the heart of the village and the landscape to the east. The overall experience is that of a pleasant location with overwhelming feelings of familiarity and comfort.

### Receptors:

This viewpoint is representative of views available to motorists and cyclists travelling along Kirton Road between the settlements of Blyton in the west and Northorpe in the east. The viewpoint is also available to the residential receptors at the eastern edge of Blyton.

### **Description of View:**

The foreground of the view comprises Kirton Road in the immediate context of agricultural fields and the Blyton Park Racing Centre, which lies beyond. Further agricultural fields are not visible beyond this since the landscape is flat, this local collection of fields are expansive and vast where the intervening hedgerows close down visibility. The middle and long distance therefore yields limited visibility across these agricultural fields and the Blyton Park Driving Centre. To the right-hand side of the view, there is Kirton Road as it takes a straight course and to the left-hand side of the view there is Kirton Road with groups and individual trees along its verges. The remainder of the horizon is made up of large-scale arable fields where hedgerows are well established but middle and distant views are not possible. There are vertical elements in the view, including power lines, the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables, and these are not notable elements due to the groups and individual trees lining Kirton Road.





# Receptor susceptibility to change

In terms of forces for change for VP62, due to the flat, featureless topography of the area, specifically lack of hedgerows, the implications of agricultural intensification are evident. Improvements to drainage features and hedgerows as a result of intensive agriculture are therefore a key force for change. Fast growing energy crops are also creating an impact on the landscape.

Overall, the susceptibility for VP62 is conditioned by the implications of arable intensification and the sparse woodland and tree cover, which is generally lacking in appropriate management. Unless carefully sited, new planting can introduce inappropriate and visually intrusive elements in the flat and open landscape. The proliferation of new large scale agricultural buildings and general increase in farm size can also introduce visual intrusions and may be difficult to mitigate due to the sparse woodland cover and conditions over planting. The relevant characteristics of the landscape therefore have a medium susceptibility to change without undue adverse effects.

Medium

### Value of view

Medium

<u>Scenic:</u> Local views towards the east are a key feature. The view is influenced by the open nature of the location and the visual relationship between the heart of the settlement at the war memorial and this viewpoint.

<u>Cultural:</u> The wider landscape setting of the settlements is hardly evident in this view or the visual relationships between adjoining Area of Greater Landscape Value (AGLV).

<u>Natural:</u> The views tend to be interesting and comfortable due the relationship with the edge of settlement. The discordant uses within the airfield, which detract from the natural qualities of the landscape are hardly evident from this location.

<u>Recreation and Enjoyment:</u> The Blyton Park Driving Centre is the key recreational resource, but its relationship with the landscape setting of Blyton is marred by the discordant uses.

<u>Local Distinctiveness and Sense of Place:</u> The presence of individual field boundary oak/ash trees is a key feature of the location as a significant group. Even the relatively nondescript occasional trees seen in isolation make a crucial contribution to this location.

<u>Health and Wellbeing:</u> Although Kirton Road is defined by strong hedgerows they are low-cut, but the hedgerow trees are strong and this gives some visual comfort and feeling of well-being to the route (given that it is a long straight road with fast moving traffic and no footways, with only narrow grass verges).

<u>Important Spatial Function:</u> There are different landscape patterns that typify the differing landscape character and its contribution to spatial function. This is particularly noticeable where the baseline views change dramatically between the settlement and just outside its boundary where the strong vegetation along the mainline railway has a strong influence.

**Overall**, the value of Viewpoint VP62 is shaped by the strong hedgerow and mature tree cover that is prominent to the north side of Kirton Road. The former airbase uses are not evident from this location and the landscape setting of Blyton is not adversely influenced by its presence. There is a noticeable difference where the baseline views change dramatically between the edge of settlement and the outlying landscape where the vegetation along the mainline railway has an influence.

### Sensitivity

Range of Features: The location comprises the local road network at the gateway and the edge of a settlement. This is a part open location due to the hedgerows that are well cut back, which helps to provide extended views, but the vegetation bordering the mainline railway helps to close down views at this location. In terms of variety, the residential properties are the main feature and the low-cut hedgerows along the Kirton Road frontage allow open visibility across the landscape towards the east and southeast. There is a strong line of mature tree and scrub cover along both sides of the mainline railway but the further hedgerows and tree cover within the small collection of fields to the northeast of Top Farm fall below the horizon.

Importance of View: This is a part open location on the local road network. The views tend to be attractive and offer some interesting and attractive features locally, including intervisibility between the heart of the village and the landscape to the east. The overall experience is that of a pleasant location with overwhelming feelings of familiarity and comfort, which raises the importance of the view.

Number of Receptors: This is the local road network that attracts local users but is also likely to attract users from the wider area since this is a secondary road with connections to Kirton in Lindsey. Overall, this is a gateway to the settlement, which raises the importance of the view.

Medium

### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set back up to 20m from the Kirton Road with proposed Site fencing to be set north of the existing roadside vegetation.

Site boundary fencing to be set back 5m from adjacent existing/proposed hedgerows to allow for proposed thickening and growth.

Panels to be set a minimum of 3m from Site boundaries.

Maintain the open character of the area by retaining views to the south across the open farmland.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Site boundary fencing to be set back 5m from adjacent existing hedgerows to allow for proposed thickening and growth.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.





### **Viewpoint VP62 - B1025 (Kirton Road)**

### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened by the foreground hedgerows bordering Kirton Road. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows to the foreground and within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the airfield land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate south, east and west of this location and the wider landscape to the southwest would also not fundamentally change.

### **Construction Access**

All throughout the construction stage, the viewpoint will be affected due to Kirton Road B1205 having 2 points of access into the Cottam 3a Site/Sites. The first access point is through Kirton Road as it connects to fields K3 and K4. The second access point is through Kirton Road as it connects to field K12. These

### Operation (Year 1)

The foreground of the view comprising Kirton Road in the immediate context of agricultural fields would hardly change since the area of panels would be set back and only visible above the hedge to the left of the view. Further agricultural fields are not visible beyond this since the landscape is flat and so there would be no change to this element of the view. To the right-hand side of the view, there is Kirton Road as it takes a straight course that would not change, but to the left-hand side of the view Kirton Road with groups and individual trees along its verges would have a backdrop of new panels. The vertical elements in the view, including power lines, the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables would add minor cumulative changes to the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Scattered native trees

Views from the B1205 Kirton Road looking north will be mitigated by the proposed scattered native trees along the southern boundary to field K1 some 500m distant.

### **Existing vegetation**

Existing vegetation to the north east of this viewpoint along Kirton Road will be augmented with irregular spaced native hedgerow trees species to infill tree cover and provide additional height as well as increasing the ecological value and range of species to the existing block of vegetation and hedgerows. Proposed Site fencing will sit 8m north of the existing roadside vegetation with panels set 19m from the roadside.

### Successional scrub planting

Successional scrub planting, extending to 35m wide at its widest, will run north/south to the western boundary of field K3 adjoining existing vegetation and running over existing underground services. Adjacent to the road and up to the small wooded area, the existing hedge will also be reinforced by irregularly spaced native hedgerow trees to mitigate views east from this viewpoint and from dwellings further west along Kirton Road. Site fencing will sit to the east of this scrub planting and will not be visible from the west. Further east along Kirton Road, a buffer of successional scrub planting, together with a proposed native hedge with hedgerow trees will augment this roadside boundary where existing vegetation is more sparce, reducing overall views of the Site from the south and west and where panels sit a little closer to the roadside. Further along Kirton Road to the east, an existing roadway will be utilized running north from the road into the Site.

### Existing hedgerows

Existing gaps within the roadside hedgerows to be infilled with mixed native hedgerow species.

Looking south towards Cotham 3b and 2, the roadside vegetation will be retained as existing in order to maintain the open character of the views to the south.

### <u>Grassland mixes</u>

Panels will sit over a proposed wildflower grassland mix, whilst a min. 10m buffer zone around existing overhead cables will be seeded with a flower-rich pollinator mix which will also extend around proposed access/Site roads.

### New hedgerows

To the eastern and western boundaries of the existing buildings on the runway, mixed native hedgerows with irregular spaced hedgerow trees will augment the existing cover, provide height and help to soften both the airfield buildings and the panels from view.

### Operation (Year 15)

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

The view will become more enclosed since the existing hedgerows will have been managed to outgrow to a height of 5m, new planting will have established with scattered trees beginning to provide some good cover and proposed hedges and scrub planting will be established. Close range views will be of scrub and scattered trees breaking up the immediate views with enhanced hedgerows across the Site helping to increase the tree cover around settlements. Longer distance views will be of layered vegetation.

**Overall**, with the Cottam 3a Site, many of the rural villages have not seen widespread expansion but development pressures continue with the close proximity to Lincoln where the demand for housing, commerce and industry is creating visual intrusion and extending the urban fringe. For development associated with the rural villages, specific mechanisms include Village Design Statements, and tree planting around settlement fringes to help integrate new development into the landscape.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site

runoff.

Decommissioning

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.



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	two access points will make Kirton Road busy during the construction stages and will affect the view.  Cable Route Corridor This Viewpoint is outside the 0.5km study area located on the outer limits. There would very limited views of this route to the southeast.  Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.
Magnitude	Medium	Low	Low	Very Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term
Significance of Effect	Moderate <b>Significant</b>	Minor – Negligible <b>Not Significant</b>	Minor- Negligible <b>Not Significant</b>	Negligible Not Significant



Viewpoint VP	P62 – B1025 (Kirton Road)	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	In Summary  There would be no intervisibility between the Cottam 3a Site, Cottam 1or Cottam 2, due to distance.  There would be no intervisibility between the Cottam 3a Site and Cottam 2 Site, due to distance, the intervening vegetation along the mainline railway and additional intervening settlement of Pilham and Aisby, hedgerows and tree cover.  Between the Cottam 3a and 3b Sites, the changes would not be readily noticeable. In the context of the Cottam 3a Site, the Cottam 3b Site occupies only a very small portion of the view due to the intervening	In Summary The Cumulative Effects upon viewpoint 62 of the Cumulative Developments is Minor at year 1 of operation and Minor at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. The closest Cumulative Development to Viewpoint 62 is Tillbridge Solar, located approximately 4.2km from the view therefore no cumulative visual effects are anticipated due to proximity.  Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character
	vegetation along the mainline railway, the foreground hedgerows and tree cover and the intervening-built form at Top Farm and Grange farm and would not result in a highly noticeable change to the view's composition. There would be a small change to existing landscape elements beyond the railway line by the addition of the area of panels in place of the arable fields at the Cottam 3b Site, but the visually detectable impacts do not alter the baseline of the receptor materially.	There would be the introduction of new elements and features comprising the solar panel areas and the substation area.  Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.  There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.8 Cottam 1, 2, 3 a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]  Overall Landscape Character and Visual Amenity Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
Magnitude	Construction: Low-Medium Operation (Year 1): Low-Medium Operation (Year 1): with only Embedded Mitigation: Low-Medium Operation (Year 15): Low-Medium Decommissioning: Low-Medium	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
Type of Effect	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Beneficial & Short Term	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Construction: Minor-Moderate <b>Not Significant</b> Operation (Year 1): Minor-Moderate <b>Not Significant</b> Operation (Year 1): with only Embedded Mitigation: Minor-Moderate <b>Not Significant</b> Operation (Year 15): Minor-Moderate <b>Not Significant</b> Decommissioning: Minor-Moderate <b>Not Significant</b>	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant



# **Viewpoint VP63 - A159 (Laughton Road)**

#### **Viewpoint Baseline:**

The view is located on the A159 (Laughton Road), looking east directly over the Cottam 3a Site and southeast towards the Cottam 3b Site with the Cottam 2 Site beyond.

Objective: This viewpoint offers views looking from the Wooded Vales Character Area 4b looking towards (and at the boundary with) the Unwooded Vales Character Area 4a. The view is towards a very slightly undulating, plateau landscape where the Wooded Vales landscape is conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop but with a former airfield on the plateau location, and the settlement of Blyton to the south. Beyond the plateau there are some local variations in landform where the land falls to the west just beyond the A159 at Laughton Common and Laughton Woods (recreational woodland). To the north, the land rises towards Scotton at approximately 20m AOD, but there are also small variations in landform between to take account of several watercourses including Northorpe Beck and its tributaries. To the south the landform extends from the plateau as generally flat until there is a gentle rise to the settlement of Aisby at approximately 20m AOD. The landform also rises towards the east (right of view) towards Northorpe and Northorpe Hall at approximately 25m AOD. The landform then continues to rise in the east towards the limestone capped scarp slope where the settlement of Kirton in Lindsay occupies higher elevation at approximately 60m AOD. In terms of enclosure, there are several woodland blocks or shelterbelts in the wider landscape including woodland at Northorpe and Northorpe Hall to the east and the expansive Laughton Woods to the west and north of the Site/Sites. To the south, the vegetation along the mainline railway and the tall shelterbelts in the field systems to the north of the Site/Sites also closes down views in this direction. At closer proximity, there is some woodland around the settlement of Blyton and around Blyton Grange and Bluebell Farm, which adds some structure to the landscape. The views are partially open at this location with most of the visibility extending west towards Laughton Common and southwest towards the n

Subjective: The viewpoint depicts a medium-scale, partially open landscape. In terms of variety, the close proximity to the woodland at Laughton Common is the main feature and the low-cut hedgerows along the A159 allow open visibility across the landscape towards the east where the conifer shelterbelts on the east boundary of the Site/Sites is just visible on the horizon. In terms of texture and colour, the vegetation along the A 159 and the extended view towards Blyton adds interest. There are also colourful tones due to the presence of the road junction and its associated signage and road markings. Masts, poles, and electricity pylons are also features on the distant horizon to the east and at close range to the south. The views are bland and unsettling in the immediate context of the Site/Sites due the presence of the A159 but the extended views towards the west show a strong visual relationship with the Wooded Vales at Laughton. Agricultural buildings at Blue Bell Farm are also evident but partially concealed by the intervening hedgerows and the hedgerow trees.

<u>Overall:</u> The view is influenced by the semi-open nature of the location and the visual relationship with the Wooded Vales at Laughton to the west. The A159 is defined by strong hedgerows which are low-cut where the hedgerow trees give some pleasant visual interest to the route (given that it is fast moving traffic and no footways). The small woodland block to the west boundary of the Site/Sites is evident from this viewpoint on the horizon along with the nearby conifer shelter belt. The viewpoint offers bland and unsettling features locally, but the wider context encapsulates the landscape to the east comprising the Wooded Vales at Laughton. The overall experience is that of a busy location with overwhelming feelings of discomfort due the presence of the A159, but the Laughton Woods and the northern edges of Blyton are distinctive features that raise the overall quality of the view and add some 'sense of place'.

#### Receptors

This viewpoint is representative of views available to walkers, motorists and residents travelling along the A159 between the settlement of Blyton and Laughton. The viewpoint is also available to the residential and recreational receptors at the junction with Blyton Road.

#### **Description of View:**

The foreground of the view comprises the A159 (Laughton Road) in the immediate context of agricultural fields and the Blyton Park Racing Centre, which lies beyond. Further agricultural fields are not visible beyond this since the landscape is flat, and this local collection of fields are expansive and vast where the intervening hedgerows close down visibility. The middle and long distance therefore yields no visibility across these agricultural fields towards the Blyton Park Driving Centre. To the right-hand side of the view, there is Laughton Road as it takes a winding course towards Blyton and to the left-hand side of the view there is Laughton Road takes on a further bend where groups and individual trees along its verges close down vies in this direction. The remainder of the horizon is made up hedgerows that are well established and so middle and distant views are not possible. There are vertical elements in the view, including traffic signage, telegraph poles and associated cables, and these are notable elements due to the open nature of this section of Laughton Road.





# **Receptor susceptibility to change**

In terms of forces for change for VP63, there are aims to protect existing rural landscape features, in particular the restoration of hedgerows since the most widespread change has been in agricultural intensification and the change from pastoral to arable cropping that has resulted in the loss of hedges, and consequently, an increase in field size. The loss of pasture is particularly evident around settlements, where grazing animals and smaller field sizes contribute to the setting and structure of several villages.

Overall, the susceptibility for VP63 is conditioned by the gently undulating, open landscape and whilst the aim is to plan new tree planting around key settlements, woodland does not form a significant component of this landscape to the east of Blyton. In considering its open and expansive character, extensive new woodland planting would be generally inappropriate other than improvements to the small woodland blocks. However, there is significant benefit with appropriate tree planting that could be used in and around settlements to increase the occurrence of semi-natural habitats and maintain the perception of a 'well-treed' landscape. The relevant characteristics of the landscape therefore have a medium susceptibility to change without undue adverse effects.

# Value of view

<u>Scenic:</u> Clear views are a key feature of the area. The distant horizon to the west reveals extended views towards the west comprising Laughton Woods and Laughton Common showing a wooded horizon, which forms part of the Wooded Vales Character Area 4a.

<u>Cultural:</u> The wider landscape setting of the settlement of Blyton promotes the importance of the landscape and form strong visual relationships with the Area of Greater Landscape Value (AGLV) at Laughton Woods.

<u>Natural:</u> The roadside tree cover gives a more comfortable feeling at this location, especially given that the road is busy with high volumes of traffic and a road junction which is highly discordant feature of the view.

<u>Recreation and Enjoyment:</u> The view is influenced by the open nature of the location, but the presence of the Blyton Park Driving Centre is not evident. As such, the extended views towards the west at the AGLV of Laughton Woods. The contribution of the AGLV to the landscape setting of Blyton is the overriding feature, which enhances the enjoyment of the location.

<u>Local Distinctiveness and Sense of Place:</u> There are colourful tones due to the presence of the of the road junction with signs and road markings. The 'sense of place' is denuded by the prominence of the junction and the busy road.

<u>Health and Wellbeing:</u> The expansive and dramatic presence of Laughton Woods to the west and north of this location enhances the feelings of well-being.

<u>Important Spatial Function:</u> The overall experience is that of a busy location with overwhelming feelings of discomfort due the presence of the A159, but the Laughton Woods and the northern edges of Blyton are distinctive features that raise the overall quality of the view and provide the key spatial function.

**Overall**, the value of Viewpoint VP63 is shaped by the presence of the busy A159 and the proximity to a large road junction with associated signage and road markings. Clear views are a key feature of this location that extend both east towards the AGLV at Laughton Woods. The contribution of the AGLV to the landscape setting of Blyton is the overriding feature, which enhances the enjoyment of the location.

# Sensitivity

Range of Features: The location comprises the local road network at the gateway and the edge of a settlement. This is a part open location due to the hedgerows that are well cut back, which helps to provide extended views. In terms of variety, the close proximity to the woodland at Laughton Common is the main feature and the low-cut hedgerows along the A159 allow open visibility across the landscape towards the east where the conifer shelterbelts on the east boundary of the Site/Sites is just visible on the horizon.

Importance of View: This is a part open location on the junction of the local road network and the primary road network. The views tend to be attractive and offer some interesting and attractive features locally, but the presence of the busy road is a significant detractor, which deflects from the importance of the view.

Number of Receptors: This is the strategic road network that attracts local users and users from the wider area since. Overall, this is a gateway to the settlement and the local road provides access to a caravan and camping park, which raises the importance of the view.

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Site boundary fencing to be set back 5m from adjacent existing hedgerows to allow for proposed thickening and growth.

Panels to be set a minimum of 3m from Site boundaries.

Wildflower meadow mix to be sown beneath proposed panels.

Panels to be set back 20m from roads.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

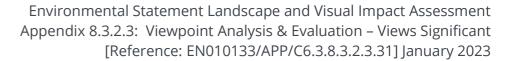
The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Medium

Medium

Medium

Not Applicable





# **Viewpoint VP63 - A159 (Laughton Road)**

# Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened by the foreground hedgerows bordering Laughton Road. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows to the foreground and within the surrounding field systems would give some partial layering, these activities would still occupy an extensive proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the airfield land use, but the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate north, south and west of this location and the wider landscape to the west would also not fundamentally change.

### **Construction Access**

There would be no view of any construction access from this viewpoint.

#### Cable Route/s

Viewpoint is outside of the 0.5km study area and there would be no view of this route.

### **Substation**

# Operation (Year 1)

The foreground of the view of the A159 (Laughton Road) would not change but the immediate context of agricultural fields would become an area of panels, and this would bring minor cumulative changes to the view. Further agricultural fields are not visible beyond and so this element of the view would not change. The setting Laughton Road as it takes a winding course towards Blyton would experience views of the new panels in the same context. There are also vertical elements in the view, including traffic signage, telegraph poles and associated cables, and these would add further cumulative changes due to the open nature of this section of Laughton Road. The existing hedgerows and trees fronting the area of new panels and Laughton Road would provide some intermediary screening.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Scattered tree belt

A 5m tree belt is proposed to the southern boundary of field K1 running east/west and adjoining existing vegetation within fields K2 and K3. This belt will help to mitigate views of the wider Site to the south and southeast as well as reducing views to the north from the Kirton Road.

### **Existing hedges**

Existing hedges to the east of field K! are to be enhanced and managed to grow out to a height of 5 m with the addition of irregularly spaced hedgerow trees to follow the character of the area. This will provide further screening from the west of the wider Site and screening from Blyton Grange to the west. The existing hedge to the western extent of field K1 is to be reinforced to mitigate views of the Scheme from the west and from the Laughton Road. This hedge will be allowed to grow out to 5m, and the addition of irregularly spaced hedgerow trees will further increase the vegetative cover and provide additional visual interest along this route and from further west.

### New hedges

A new hedge is proposed to the northern boundary of field K1 where none exists. This will lie some 3.5m south of the existing ditch further mitigating views south from the road and Bluebell Farm. Existing trees provide reasonable cover here and the addition of proposed hedgerow trees will help to augment the tree cover locally and enclose this road somewhat. Further east, a new hedgerow is proposed to the east of Blyton Grange to the western boundary of field K5. This will mitigate views from this dwelling as well as strengthening the field pattern locally and will create a further layer of vegetation with hedgerow trees potentially visible in places from views from the west breaking up the main bulk of the panelled area.

New hedges are proposed to the eastern boundary of field K4 and the western and northern boundaries of K7 screening views of the Site whilst consolidating the structure of the existing field boundaries.

#### Grassland mixes

A tussock mix is proposed to the boundaries of field K1 with flower rich pollinator mixes proposed beneath existing power lines that cross the Site. Wildflower meadow mix is to be seeded beneath panels.

# Mitigation (Year 15)

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

The view will become more enclosed since the proposed new hedgerows will have established to create a strong field structure and screen views of the Scheme. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the close-range, the existing vegetation and proposed/enhanced hedgerows will screen the Site/Sites with mid and longer distance views appearing as a layered well-treed landscape with a backdrop of strong woodland features to some views.

**Overall,** with the Cottam 3a Site, pressure in the wider landscape from arable cultivation has resulted in field enlargement, removing boundaries, and creating a more open setting to existing airfields. Within this open setting, the Roman roads are a key feature, but they are also under threat from lack of management and inappropriate planting that stands out in the open landscape. Airfields are a key feature, and the aim should be to ensure that any new development limits visual intrusion and the loss of surrounding landscape features in the context of these airfields.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long



Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.2.3: Viewpoint Analysis & Evaluation – Views Significant [Reference: EN010133/APP/C6.3.8.3.2.3.31] January 2023

	This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	term landscape and visual effects of this mitigation.
Magnitude	Medium	High	Medium	Very Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Moderate <b>Significant</b>	Major <b>Significant</b>	Moderate Significant	Negligible <b>Not Significant</b>



Viewpoint VF	iewpoint VP63 - A159 (Laughton Road)			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, there no in combination visual effects are anticipated.	In Summary The Cumulative Effects upon viewpoint 63 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects.		
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area.		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]		
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



# Viewpoint: LCC - C - A - Ingham Road

### **Receptor Baseline:**

This viewpoint is located on Ingham Road, looking southeast over the Cottam 1 South Site and northeast over the Cottam 1 North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying, flat landscape where the wider context of a broad vale is fully evident due to the low hedgerows in the foreground. The land use is mainly productive arable farmland but with a local collection of smaller scale fields associated with the settlement of Stow to the east and Stow Pasture to the west. This framework of the smaller scale fields are generally concentrated in a 'ladder like' arrangement to the north of Ingham Road. These smaller scale fields are distinguished in views from Ingham Road by the tree cover in the field boundary hedgerows and deciduous woodlands are evident on the horizon to the north, such as Normanby Gorse. In terms of man-made elements, the main influences are the residential properties fronting the north side of Ingham Road, but the flat-topped houses are not visible at this location. (Other flat-topped houses are located nearby just to the northwest of this green lane off Normanby Road to the south of East Farm at Normanby by Stow). Ingham Road crosses the area in an east west direction with a clear straight alignment and meets with Fleets Lane at right angles. Fleets Lane is also prominent in the landscape but is not evident in this view.

<u>Subjective:</u> The viewpoint depicts a medium to large-scale, open landscape divided by arable fields and some pasture. In terms of variety, the combination of features is limited to low hedgerows with few trees. There are some distinctive tree clumps to the northwestern of this location associated with the tributaries and land drains of the River Till and similar tree groups to the south associated with the various land drains that feed the River Till. In terms of variety, the landscape is simple but balanced and well-managed giving the impression of an invigorating view. In terms of colour and texture, some colour is evident within the bordering hedgerows and the tree cover is varied, which also adds interest. The hedgerows are however mostly closely cut which creates a highly managed context within an otherwise attractive and interesting landscape.

Overall: The view is pleasant and typical to the character of the east west lanes (with grass verges) in this locality. There is a strong feeling of openness and somewhat bland context to the view. The overall experience of this view is pleasant but also lacking in vigour due to the straight alignment of the road framed by hedgerows to each side. The bordering fields however are softer and add some sense of intimacy, even though many are under a single crop. This location also gives a good appreciation of the wider landscape from the settlement edge and Ingham Road is a prominent element of the view with regular traffic as it connects Stow settlement. This is an attractive entrance to the settlement where the relationship with the wider landscape gives the location a 'sense of place'.

### **Receptors:**

The viewpoint is representative of views for users of Ingham Road when travelling east west between Stow and Ingham.

#### **Description of View:**

The foreground of the view comprises of the immediate context of Ingham Road with arable fields in the foreground with no hedgerow boundary. Further agricultural fields are only just visible beyond since the landscape is low-lying and almost flat. This collection of fields are expansive and views are wide reaching since the intervening hedgerows are low cut with very few trees. The middle and long distance therefore yields some visibility. To the right-hand side of the view, there are further agricultural fields where the small rectangular woodland (unnamed) to the west of Fleets Lane stands out in the landscape as a prominent feature due to the open expansive nature of the agricultural land use. To the left-hand side of the view, there are residential properties bordering the west side of Ingham Road. The distant horizon is made up of the higher land forming the Limestone Scarps and Dipslopes Character Area 6a with woodlands and scattered trees in the foreground. The roadside telegraph poles are wires are the vertical elements in the view.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
In terms of forces for change for LCC-C-A, poor hedgerow condition is commonplace across the area with hedgerows often excessively trimmed and gappy and that few surviving trees are in poor condition. There has also been a steady decline in permanent pasture and conversion to arable uses around the edges of settlements. Agricultural intensification and farm amalgamation is leading to a more homogenous landscape. Where woodlands survive, such as Normanby Gorse, Thorpe Wood and Brattleby Gorse, they are important features in the views across the area and providing relief within the agricultural setting.  Overall, the susceptibility for LCC-C-A is conditioned by the need to conserve rural settlement pattern and ensure that new development is complimentary to intrinsic local character. Hedgerow quality is the key aspect of the existing character, where they are often tightly trimmed, gappy and species-poor. However, there are significant opportunities to restore and manage hedgerows, where they have been lost and enhance tree cover. The relevant characteristics of the landscape therefore have some ability to accommodate change without undue adverse effects given there is scope to restore the hedgerows and their associated habitats and landscape features that have been lost through agricultural intensification. The relevant characteristics of the landscape therefore have a medium susceptibility to change without undue adverse effects.	Scenic: Agriculture is the dominant land use, with most of the land being used for growing arable crops. The landscape reveals views of an open nature beneath vast skies that are often extensive and uninterrupted.  Cultural: A predominantly rural and sparsely settled area with small villages and dispersed farms and residential dwellings linked by long straight roads (such as Ingham Road) and a network of minor tracks (such as the green lane) which connect with the River Till and its tributaries.  Natural: Very little semi-natural habitat remains across the area, apart from habitat associated with the River Till and its tributaries, and green lanes which link to this asset are an important feature of the landscape.  Recreation and Enjoyment: The public right of way (PROW) network is limited apart from a few north south routes that connect between the long straight roads running east to west across the area. Where local green lanes can supplement this network, this should be recognized.  Local Distinctiveness and Sense of Place: A regular pattern of medium to large fields are enclosed by hawthorn hedges. Where the recreational network gives access to appreciate this feature this gives a strong sense of identity to views.  Health and Wellbeing: Access to these remote areas is mainly confined to the long, straight roads since PROW connections are limited across the area, but where green lanes exist, they are important.  Important Spatial Function: The predominance of large-scale agriculture and limited settlement and development provides an important spatial function, but the green lanes and footpath and bridleway network are important to this spatial function.  Overall, the value of Viewpoint LCC-C-A is shaped by this area being extensively farmed over a long period, where very little semi-natural habitat remains, and the agricultural intensification has diminished the 'sense of place' in parts. The presence of green lanes helps to enhance this 'sense of place' and provide extended access to other features such as	Range of Features: This location comprises the local lane network that forms an east-west connection between the north-south major road network. This is an open location with low-cut hedgerows in the context of the settlement edge with a limited range of features other than the backdrop of woodland cover including the riparian vegetation along the course of the River Till and the distant woodland at Thorpe Wood and Brattleby Gorse.  Importance of View: This is part of a local lane network at a location where the views capture a good appreciation of the surrounding countryside. This being a local lane with grass verges and tall hedgerows in parts however does raise the level of importance of the view.  Number of Receptors: This location captures road users and is primarily a draw for local residents. The location is unlikely to capture a high number of visitors from a wider area as there is little opportunity to park on the narrow lanes or incentive/inspiration to walk from here.	Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:  Panels to be set a minimum of 15m from adjacent PRoW.  Panels to be set a minimum of 50m from adjacent residential property boundaries.  Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.  Panels to be set a minimum of 3m from Site boundaries.  Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.  Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.  The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.
Medium	Medium	Medium	Not Applicable

around field boundaries

and PRoW



be landscape and biodiversity

to the existing vegetation

mitigation works, including

#### Viewpoint: LCC - C - A - Ingham Road Construction **Operation (Year 1) Operation (Year 15) Decommissioning** The foreground of the view would not change in the immediate context of Ingham Road and remain as arable With secondary mitigation such Activities considered includes, site A similar process to that of construction preparation / enabling works, fields with no hedgerow boundary. Further agricultural fields are only just visible beyond and since the as planting and grass seeding stage, but with the Scheme being no construction, and commissioning landscape is low-lying and almost flat, the panel areas would appear as a slight detectable change to the view. being taken into account at the longer operational. This is an This collection of fields are expansive and views are wide reaching and since the intervening hedgerows are low operational stage (Year 15) the with effects such as construction assessment of the Site in winter but assumes retention of existing vegetation traffic, noise and vibration from cut with very few trees, the new areas of panels would appear as a slight change to the view's composition. The following changes to the middle and long distance yields some visibility, but the intervening hedgerows are likely to close down the construction activities, dust landscape would occur and the and builds upon the proposed primary visual effects are set out below. generation, site runoff, mud on presence of the panel areas. To the right-hand side of the view, there are further agricultural fields where the and secondary mitigation that had been roads, and the visual intrusion of small rectangular woodland (unnamed) to the west of Fleets Lane stands out in the landscape as a prominent established as the future baseline. feature due to the open expansive nature of the agricultural land use and the new area of panels would hardly The view will not become any plant and machinery on site. Effects are those arising from activities be visible beyond this feature. To the left-hand side of the view, there are residential properties bordering the more enclosed than the current for the duration of the decommissioning At the early stages of the west side of Ingham Road and this would close down views of the panel areas towards the north. The distant situation. This viewpoint lies including site traffic, noise and vibration horizon is made up of the higher land forming the Limestone Scarps and Dipslopes Character Area 6a with construction stage, ground and close to the village of Stow with from decommissioning activities, dust lower-level activities such as the woodlands and scattered trees in the foreground and this would remain as a feature of the view. The roadside development set back from the generation and site runoff. construction of the solar panel telegraph poles are wires are the vertical elements in the view, but they are unlikely to add any cumulative Ingham Road looking northeast areas and associated changes to the view in combination with the panel areas. and southwest. Looking Following decommissioning, the land is infrastructure and inverters would northeast from this viewpoint likely to be returned to arable be screened due to the presence The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have towards the Cottam 1 West Site, production. The Site will however of the intervening hedgerows had limited physical or visual impact at this stage: a number of scattered tree belts benefit from the significantly enhanced dividing the collection of fields are proposed around the River tree and hedgerow planting that has Scattered tree belt that border Ingham Road and the Till setting the proposed Scheme been carried out and has begun to distance from the receptor. During Looking northeast from this viewpoint towards the Cottam 1 West Site, a number of scattered tree belts are back 50m from the watercourse. mature to create a much stronger and the latter part of the construction proposed around the River Till setting the proposed Scheme back 50m from the watercourse. A shelterbelt is proposed to the robust landscape, retaining and stage, views would become western boundary of field E1 to enhancing the overall character and available of the elevated activities Belts are proposed within fields E1, E2 and to the eastern extents of D4. These tree belts will provide height and augment the existing vegetation providing considerable biodiversity on this boundary to mitigate above the hedgerows, but the interest across the landscape whilst helping to define the route of the river with the addition of some riparian benefits over the years. Bird mitigation vegetation. These belts will act as a buffer to, and screen views of the panels from the watercourse. riparian vegetation bordering the views of the Scheme from the fields are likely to be retained and the River Till would provide some west and from Ingham Road. potential may exist to retain grass background context. These margins to preserve some varied land activities would be confined to a A shelterbelt is proposed to the western boundary of field E1 to augment the existing vegetation on this **Overall**, in terms of mitigation use and maintain long-term small portion of the view due to boundary to mitigate views of the Scheme from the west and from Ingham Road. for Cottam 1 South, initiatives improvements in biodiversity in the local the distance from the receptor would look to enhance the river area, all of which will benefit visual and the layering provided by the Existing hedges systems and their floodplains for receptors. intervening hedgerows. There Existing vegetation around fields F2 and F7 is to be retained, helping to screen Site/Sites beyond the river Till. their ecological importance and would be a small change to contribution to biodiversity. The With secondary mitigation considered, existing landscape elements, but Elsewhere existing hedgerows that require enhancement will be grown out and managed to a height of 5m with aim is to protect belts of the negative effects of the physical the impacts would be slight and decommissioning will be balanced out the introduction of irregularly spaced hedgerow trees along their length to increase tree cover locally, help to waterside trees and riparian would not alter the baseline mitigate views into the development areas and strengthen both the character area and the historic field habitats to distinguish by the long term landscape and visual materially that it would be readily patterns. watercourses. The planting of effects of this mitigation. noticeable. trees and replacing lost Enhanced hedges are to be introduced to the western and southern boundaries of field E5 and E6 as well as the hedgerows in flood plains to Other works would be undertaken northern boundary of field E2. improve landscape character and attenuate flood flows is also in connection with the construction including fencing, To the south of the Ingham Road, enhanced hedgerows will be provided to the northern and southern promoted. gates, boundary treatment and boundaries of Field D3 and the southern boundary of D2. other means of enclosure and Between Years 1 and 15, the works for the provision of security following beneficial effects will be and monitoring measures such as New hedgerows are proposed as necessary where none exist to help to mitigate view of the Scheme and will achieved in terms of Visual me managed to a height of 5m and contain native hedgerow trees. CCTV and the laying down of Receptors: internal tracks. There would also Grassland reversion

A new hedge will be provided to the northern boundary of field D2 and one between fields D2 and D3 adjacent



SOLAR PROJECT			[Kererence, Livorors	53/APP/C0.5.6.5.2.4.1] January 2025
Magrituda	planting and the improvement of the foreground hedgerows  These short-lived construction activities would not obstruct a significant proportion of the view or become a dominant feature. There would be a minor change to the arable land use, but the field boundaries and the associated tree cover would remain intact to conceal the works to a localised area.  Construction Access All throughout the construction phase the viewpoint will be affected due to access routes off Ingham Road into the Cottam 1 South Site.  Cable Route/s Viewpoint is outside of the 0.5km study area and there would be no view of this route.  Substation This viewpoint is within the 2km study area. Cottam 1 substation is likely to be visible to the north of this viewpoint above existing vegetation.	Turtle Dove mitigation A large area of Turtle Dove habitat is to be provided in fields F1, 2 and 7 as well as further east in field E6.  Grassland mixes A 20-30m margin of tall herb mix will be provided either side of the River Till with existing groundcover vegetation being retained to the river edges as appropriate.  Fields D2 and D3 and fields D7 and D9 are to be restored to provide floodplain meadow incorporating suitable species.  Elsewhere, a tussock mix will be sown adjacent to existing and proposed vegetation with a flower rich pollinator mix provided on south and west facing boundaries and other areas as appropriate.  Adverse effects:  Panels and structures across the landscape Increased hard standing areas Increased traffic locally Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	<ul> <li>Increased woodland/vegetation cover</li> <li>A more varied landscape</li> <li>Improved (more natural) management of exiting vegetation</li> <li>Less expanse of intensively managed arable land</li> <li>A less exposed and windswept landscape</li> <li>Water quality improvements</li> <li>Potential animal grazing</li> <li>Reinstatement of historic field patterns</li> <li>Bird mitigation fields</li> <li>Significantly improved biodiversity</li> <li>Growth of existing and proposed vegetation is assumed to be:</li> <li>Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.</li> <li>New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.</li> <li>Existing hedgerows: 0.9m at Year 1 and 5m at Year 1 and 5m at Year 15.</li> </ul>	
Magnitude	Low	Low	very LOW	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Minor <b>Not Significant</b>	Minor Not Significant	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint: Lo	CC - C - A - Ingham Road	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	In Summary It is anticipated there would be there would be no intervisibility between the Cottom Sites, due to distance, the intervening settlement of Upton. Glentworth and	In Summary The Cumulative Effects upon viewpoint LCC-C-A of the substation and Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and proximity of the receptor to the Sites. Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.
	Heapham, hedgerows and tree cover.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Adverse & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant



# Viewpoint: LCC-C-C - Stur/73/1

### **Receptor Baseline:**

This viewpoint is situated on PRoW, footpath (Stur/73/1) looking east towards the Cottam 1 South Site and northeast towards the Cottam 1 North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying almost flat landscape within the wider context of a broad vale, which is very conspicuous in this view. There are also views across this vale towards the Limestone Scarps and Dipslopes Character Area 6a, where the landform rises sharply to capture the ridgeline at Cammeringham and Brattleby. The landform also rises gently in the west (left of view) towards the settlement edge of Sturton by Stow (rising from 15m AOD to 20m AOD). The land use is predominantly arable with some deciduous woodlands and shelterbelts in the far distance, such as those to the east of Fleets Lane at Brattleby Thorns and Cammeringham. Tree clumps and hedgerow trees are also dominant in the view and contrast heavily with the open arable landscape. In terms of man-made features, there is the settlement edge of Sturton by Stow, otherwise there is very little built influence. Within the outlying landscape, settlement is very sparse comprising scattered farmsteads at Furze Hill, Lower Furze Hill and The Grange. There are also isolated dwellings known as Fleets Cottages which stand out as a strong built influence in the foreground of the view.

<u>Subjective:</u> The view depicts a large-scale landscape, that is mostly exposed but with some areas of enclosure due the strong hedgerow network with mixed species comprising spindle and hawthorn. There are far-reaching views towards the limestone scarp slope. There are also rare views towards the Lincoln Cliff and the Lincoln Minster due to the relatively higher elevation at this point (approximately 15m AOD). There are also direct views towards the limestone capped ridgeline at Cammeringham and Brattleby where the woodland cover is a strong feature on the horizon. In terms of variety, the combination of landscape features includes farmsteads, deciduous and coniferous woodland, strong hedgerows, poplar shelterbelts and hedgerow trees that present a varied and harmonious composition. In terms of texture, the arable fields are highly managed with a muted colour combination giving an impression of an interesting landscape with woodland cover being the dominant component on the horizon. This view is balanced in terms of interest by the far reaching, views towards the limestone scarp slope at Cammeringham and Brattleby.

<u>Overall:</u> The view is influenced by the intensive arable landscape where the presence of hedgerows helps reduce the scale. This is a quiet location (even though it is in close proximity to Sturton by Stow). The local road network passes across the landscape with some right-angled bends in the foreground context of the distant ridgeline. The viewpoint depicts a large-scale landscape that is divided by a strong hedgerow network, which helps to decrease the sense of scale. This is a quiet spot, and the overall experience is a pleasant and invigorating given the proximity to the settlement of Sturton by Stow. The overall experience within this viewpoint is interesting and very pleasant due to the presence of the vast expanse of landscape.

### **Receptors:**

This viewpoint is representative of views for walkers using the footpath (Stur/73/1) that runs between the settlement of Sturton by Stow in the west and Fleet's Lane in the east.

#### **Description of View:**

The foreground of the view comprises of large very gently sloping agricultural fields divided by Fleets Lane (that passes north south) with further agricultural fields that are visible beyond this as far as the course of the River Till. The collection of fields are defined by hedgerows, but they are low and gappy with few hedgerow trees. In the middle distance there is Fleets Cottages then to the left there is further riparian vegetation cover bordering the River Till visible amongst hedgerows and hedgerow trees along with woodland at Coates. To the right-hand side of the view there are woodlands comprising Thorpe Wood and Brattleby Thorns. The remainder of the horizon is made up of woodlands at Brattleby and Cammeringham, trees, hedgerows, and farm buildings in the middle and long distance. There are some vertical elements in the view, including telegraph poles and associated cables in the distance, but these are very minor elements in the context of the wider landscape and the dark wooded backdrop.





In terms of forces for change for LCC-C-C, the landscape has a strong rural character, but tranquility levels are being disturbed by development pressures from the larger scale settlements and major routes across the area. Tranquility is however associated with the winding lanes and landscape-scale projects such as the Trent Vale Landscape Partnership which can help by offering increased recreational and educational opportunities within these areas.

**Overall,** the susceptibility for LCC-C-C is conditioned by the limited network of footpaths and bridleways and the availability of the rural roads and minor tracks for extended access. The relevant characteristics therefore have a high to medium susceptibility to change without undue adverse effects. There is however scope to increase recreation opportunities including where there are natural features and historical elements to draw interest from residents and tourists.

<u>Scenic:</u> The major roads and the network of minor lanes within the Unwooded Vales Character Area 4a as strong functional feature running through the landscape, which contribute strongly to scenic factors. Fleets Lane is a key part of this network.

<u>Cultural:</u> This network of minor lanes link supports the linking of the string of small, nucleated settlements along the B1241 such as Sturton by Stow, Stow, Normanby by Stow, and Willingham by Stow. Views from these minor lanes towards the landscape setting of the settlements provide the cultural context to views from roads such as Fleets Lane.

<u>Natural:</u> These minor lanes provide attractive destinations as narrow country lanes often with hedgerows on both sides or ditches that enhance the rural quality of the area.

<u>Recreation and Enjoyment:</u> The east-west travel direction often links the older settlements moving in a more random pattern following minor roads. These roads gain access to smaller villages and are popular for recreation.

Local Distinctiveness and Sense of Place: This is a predominantly rural and sparsely settled area with small villages and dispersed farms linked by quiet lanes such as Fleets Lane that connect across the landscape to the wider strategic road network linking the cities of Nottingham and Lincoln.

<u>Health and Wellbeing:</u> The local roads (that gain access to smaller villages) are popular for recreation since they provide attractive destinations as narrow country lanes often with high levels of tranquility and isolation.

<u>Important Spatial Function:</u> The bypassing of original village changes the spatial function of the landscape these minor routes such as Fleets Lane play an important role.

**Overall**, the value of Viewpoint LCC-C-C is shaped by the wide range of features which makes one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes such as Fleets Lane that are often tranquil with wide grassed verges.

Range of Features: The location comprises the public footpath network at the edge of the settlement that forms a connection to the network of local lanes. Views from these outlying footpaths towards the landscape setting of the settlements provide the cultural context to views such views towards Fleets Lane where the roadside hedgerows and riparian vegetation beyond create a good level of visual containment and interest.

Importance of View: This is part of the local footpath network within a settlement where the PRoW network is abundant giving a good level of connectivity with the outlying local lanes for informal recreation. This being a section of footpath that is open, and which passes from higher elevations at the settlement edge raises the level of importance of the view.

<u>Number of Receptors</u>: This location captures a limited range of receptors and is primarily a draw for local residents. The location is unlikely to capture a high number of visitors from a wider area as there is little opportunity to park on the narrow lanes and walk from here.

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

High to Medium Medium Not Applicable



# Viewpoint: LCC-C-C - Stur/73/1

# Construction Activities considered includes, site preparation

/ enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would result in a small change to the existing landscape elements due to the distance from the receptor. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the distance, the layering of the intervening hedgerows and riparian vegetation bordering the River Till would provide some screening such that these activities would not be readily noticeable.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a small proportion of the view and would not result in a change to the view's composition. There would be a slight change to the arable land use since the field boundaries and the associated tree cover would remain intact and provide layering and screening from this distance.

#### **Construction Access**

There would be no view of any construction access from this viewpoint.

# Cable Route/s

Viewpoint is outside of the 0.5km study area and there would be no view of this route.

### **Substation**

# **Operation (Year 1)**

The foreground of the view will not change from the large very gently sloping agricultural fields. Fleets Lane (that passes north south) would still remain as a feature of the view with further agricultural fields that are visible beyond this as far as the course of the River Till that would remain free of panels. In the middle distance there is Fleets Cottages then to the left there is further riparian vegetation cover bordering the River Till visible amongst hedgerows and hedgerow trees along with woodland at Coates and these would remain as features in the view. To the right-hand side of the view there are woodlands comprising Thorpe Wood and Brattleby Thorns, which would not alter and the remainder of the horizon comprising woodlands at Brattleby and Cammeringham, trees, hedgerows, and farm buildings in the middle and long distance would also remain as a feature.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Scattered tree belt

Looking northeast from this viewpoint towards the Cottam 1 North Site, a number of scattered tree belts are proposed around the River Till setting the proposed Scheme back 50m from the watercourse.

Belts are proposed within fields E1, E2 and to the eastern extents of E5. These tree belts will provide height and interest across the landscape whilst helping to define the route of the river with the addition of some riparian vegetation. These belts will act as a buffer to, and screen views of the panels from the watercourse and provide additional flood risk mitigation.

Directly east, further belts are proposed to the east of fields D7 and D9 within the floodplain and to the west of field D10 again providing defining features along the River Till and contributing to the flood risk mitigation in this area.

### Shelterbelt

A shelterbelt is proposed to the western boundary of field E1 to augment the existing vegetation on this boundary to mitigate views of the Scheme from the west and from Ingham Road.

### Existing hedges

Existing vegetation around fields F2 and F7 is to be retained, helping to screen Site/Sites beyond the river Till.

Elsewhere existing hedgerows that require enhancement will be grown out and managed to a height of 5m with the introduction of irregularly spaced hedgerow trees along their length to increase tree cover locally, help to mitigate views into the development areas and strengthen both the character area and the historic field patterns.

Enhanced hedges are to be introduced to the western and southern boundaries of field E5 and E6 as well as the northern boundary of field E2.

Reinforce hedgerow to the western boundary of fields D5, D6 and D7 and allow for it to grow out.

# Operation (Year 15)

Secondary mitigation such as planting, and grass seeding would be taken into account at this stage to include the following changes to the landscape:

The view will not become any more enclosed since the planting mitigation will be implemented on the east side of Fleets Lane. The aim should be to plan new woodland in the most suitable locations. This may include in and around settlements, where woodland would help integrate new development into the landscape and in more intimate low-lying areas, where woodland would help create a mixed pattern of land use, especially when viewed at a distance. Consideration would also be given to the management of existing trees and woodland, enhancing biodiversity value and age structure through new planting and the creation of woodland edge habitats. An increase in grassland reversion would also be encouraged, increasing the occurrence of seminatural habitats.

Overall, in terms of mitigation for the Cottam 1 Site/Sites, due to the limited network of public rights of way (PRoW) across the area the aim is to enhance the river corridors and their flood plains for their recreational importance and the Trent is the main river providing a valuable link. The Trent Valley Way in particular, provides a long-distance route. The other notable river is the upper parts of the Witham of which the River Till is a tributary. The aims are to extend the non-road network, especially where it can link people to woodlands and river corridors. Trees and hedgerows make an important contribution and improvements on approaches to villages could improve the identity of the local landscape for the benefit of recreation.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land

# **Decommissioning**

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.





	This viewpoint is within the 2km study area but there would be only a potentially very minor distant view of the Substation at Cottam 1.	To the south of the Ingham Road, enhanced hedgerows will be provided to the northern and southern boundaries of Field D3 and the southern boundary of D2.  New hedges New hedgerows are proposed as necessary where none exist to help to mitigate view of the Scheme and will me managed to a height of 5m and contain native hedgerow trees.  A new hedge will be provided to the northern boundary of field D2 and one between fields D2 and D3 adjacent to the existing vegetation and the ditch, fully enclosing this small block.  Turtle Dove mitigation A large area of Turtle Dove habitat is to be provided in fields F1, 2 and 7 as well as further east in field E6.  Grassland mixes A 20-30m margin of tall herb mix will be provided either side of the River Till with existing groundcover vegetation being retained to the river edges as appropriate.  Fields D2 and D3 and fields D7 and D9 are to be restored to provide floodplain meadow incorporating suitable species. Elsewhere, a tussock mix will be sown adjacent to existing and proposed vegetation with a flower rich pollinator mix provided on south and west facing boundaries and other areas as appropriate.  Adverse effects:  Panels and structures across the landscape Increased hard standing areas Increased traffic locally Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	<ul> <li>A less exposed and windswept landscape</li> <li>Water quality improvements</li> <li>Potential animal grazing</li> <li>Reinstatement of historic field patterns</li> <li>Bird mitigation fields</li> <li>Significantly improved biodiversity</li> <li>Growth of existing and proposed vegetation is assumed to be:</li> <li>Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.</li> <li>New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.</li> <li>Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.</li> <li>Shrubs: 0.9m at Year 1 and 5m at Year 15.</li> </ul>	
Magnitude	Low	structures visible above existing vegetation  Low-Medium	Low	Low
Magnitude	LOW	Low-ivieului i		LOW
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Minor <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Minor <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint: LCC-C-C - Stur/73/1			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to intervening tree and hedgerow cover and the settlements of Willingham by Stow, Upton and Heapham. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint LCC-C-C of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation.  This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.	
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]	
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.	
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features.  Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.	
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low	
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term	
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant	



Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.2.4: Viewpoint Analysis & Evaluation – Views Not Significant [Reference: EN010133/APP/C6.3.8.3.2.4.2] January 2023



# **Viewpoint: LCC-C-E - ProW Ingh/27/2**

#### **Receptor Baseline:**

This viewpoint is located on PRoW, footpath (Ingh/27/2) at the junction with Stow Road, looking west towards both the Cottam 1 North Site and Cottam 1 South Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a very gently rolling landscape at the foot of the scarp slope. The wider context of the broad lower-lying valley is fully visible at this location due to the low hedgerows and distinct lack of woodland and tree cover. There are also extensive west facing views towards Floodplain Valleys Character Area 3a, where the Trent power industry valley is clearly evident in the context of the wider floodplain. The land use is predominantly arable, and large scale with a limited number of features other than the vast and expansive views. In terms of variety, there are some strong hedgerows, but they are low-cut and very intermittent between the expansive arable fields. There are very few hedgerow trees, however extended views towards the horizon to the south capture the woodlands to the west of Cammeringham. These woodlands include Poplar Wood, Long Covert, Cammeringham Long Covert and woodland associated with Brattleby Hall. In terms of man-made influences, the viewpoint is located to the southwest of the settlement of Ingham where the built form is just evident within the view. Other man-made influences include the presence of Stow Lane, which has a long straight alignment and forms a discordant feature. The view also extends north to capture the windmill at the edge of Ingham as it stands out on the skyline.

<u>Subjective:</u> The viewpoint depicts a large-scale, open landscape at the edge of the settlement where the absence of hedgerows and tree cover allow extensive and panoramic views towards the Trent floodplain. Woodlands located around Brattleby Hall and the settlement of Brattleby are also visible on the far horizon to the south (left of view) and include both deciduous and coniferous species that add some containment to the view, otherwise there are very few features on interest. The nature of view is a busy location due to the long, straight road and fast-moving traffic.

<u>Overall:</u> The view is typical in character to the string of settlements that follow the scarp slope where the experience is pleasant, and where the open arable landscape is a dominant feature with distant views towards the west. The vast, exposed landscape is the main feature of this view and hedgerows and hedgerow trees close to the road helps break down the vast arable fields in places. The overall experience is interesting, pleasant, and invigorating.

#### Receptors:

This view is representative of views available to walkers, motorists and residents travelling between Ingham and Stow. The view is also representative of users of the footpath network to the southwest of the settlement of Ingham where a wider network of footpaths is available around the edge of the village.

#### Description of View:

The foreground of the view comprises of Stow Lane in the immediate context of large scale and expansive agricultural fields with a limited network of hedgerows. Further agricultural fields are visible beyond this since the landscape is gently undulating, and this local collection of fields are expansive and vast where the intervening hedgerows are absent allowing extended visibility. The middle and long distance therefore yields good visibility. To the right-hand side of the view, there is a tall road-side hedgerow, further, a collection of agricultural fields that are smaller in scale and divided by hedgerows and tree cover. To the left-hand side of the view there is a further collection of large-scale fields with a local collection of small woodlands comprising Long Covert, Cammeringham Low Covert, Brattleby Gorse and Poplar Wood. The remainder of the horizon is made up of an open skyline with few vertical elements and there are distant views towards the River Trent and its associated power industry.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
In terms of forces for change for LCC-C-E, the main sensitivity is focused on the ancient enclosures that has been weakened by modern agricultural practices. The settlement pattern that defines the contrast between the small compact villages and larger market towns remains largely intact, but their landscape settings are risk of demise from expansion and development.  Overall, the susceptibility for LCC-C-E is conditioned by string of historic settlements that are aligned approximately north to south and the Trent floodplain where there are surviving ancient enclosures characterised by small field sizes. The mixed farming heritage is also fundamental in retaining landscape character and should be managed to ensure the area continues to reflect its long history of agricultural land use. The relevant characteristics of the landscape therefore have some ability to accommodate change without undue adverse effects given there is scope to protect the character and diversity of the farming heritage of the area despite the erosion of traditional character and ecosystems through post-war agricultural intensification.	Scenic: The roads and their associated tree belts combine to give a subtle grain to the landscape. The approaches to edges of settlements such as Ingham benefit from this this tree as a 'gateway feature' is a distinctive part of their setting.  Cultural: The landscape shows evidence of historic settlement with farms and nucleated villages and small hamlets. In terms of variety, there are some strong hedgerows, but they are low-cut and very intermittent between the expansive arable fields.  Natural: There are extensive expanses of semi-natural habitat and rivers and streams that are an important landscape feature such as the River Till and its associated tributaries.  Recreation and Enjoyment: The Unwooded Vales are valued for recreation which often focuses on the locations where panoramic views are possible from elevated locations from rising land at the edges of the Vales such as Ingham.  Local Distinctiveness and Sense of Place: The landscape has a 'strong sense of place' with major landform features flanking the lower lying areas creating broad scale visual containment along the ridgeline to the east.  Health and Wellbeing: The Unwooded Vales provide a very limited network of PROW leading to the dependence on the more routes that criss-cross the area in all directions, linked by a series of narrow tracks that lead to isolated farmsteads, and which often create 'no-through roads' in the landscape.  Important Spatial Function: The landscape benefits from an expansive landscape. Wide panoramic views are also possible from the low hills and ridges that form watersheds between watercourses. This contrasts with the lower lying areas where intact hedgerows and belts of riverside trees truncate views.  Overall, the value of LLC-C-E is shaped by the strong agricultural character and presence of the far-reaching views, with wide areas retaining a strong sense of openness. Woodland cover does not form a significant component in this relatively expansive landscape.	Range of Features: This location comprises an edge of settlement context. This is a part enclosed location with some built development to the northeast and a good network of hedgerows that are outgrown with mature trees and some fields are in pastoral use. There is a typical range of features associated with the settlement where domestic uses are juxta positioned with bordering farmland and which subtly channel views towards the outlying landscape.  Importance of View: This is the local footpath network that provides good connectivity east west between Ingham and the small settlement of Coates. There being a good network of public footpaths in this location dilutes the level of importance of the view.  Number of Receptors: This is a public footpath network, which forms an almost continuous north south and east west framework to the western edge of the settlement. The route is likely to capture local walkers. There may possibly be some users form a wider area since the Unwooded Vales is valued for recreation however this often focuses on the locations where panoramic views are possible from elevated locations from rising land at the edges of the Vales.	Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:  Panels to be set a minimum of 15m from adjacent PRoW.  Panels to be set a minimum of 50m from adjacent residential property boundaries.  Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.  Panels to be set a minimum of 3m from Site boundaries.  Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.  Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.  The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.
Medium to High	Medium	Medium to High	Not Applicable





# **Viewpoint: LCC-C-E - ProW Ingh/27/2**

Construction

# Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be screened due to the distance from the Site/Sites and the intervening topography. During the latter part of the construction stage, views are unlikely to become available of the elevated activities due to the distance. There would be a small change to existing landscape elements, but the impacts would be slight and would not alter the

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

baseline materially that it would be

readily noticeable.

These short-lived construction activities would not obstruct a significant proportion of the view or become a dominant feature. There would be a minor change to the arable land use, but the field boundaries and the associated tree cover would remain intact to conceal the works. There would not be a fundamental change to the surroundings to the north, south and east of the area.

### **Construction Access**

There would be no view of any construction access from this viewpoint.

### Cable Route/s

# **Operation (Year 1)**

The foreground of the view comprises Stow Lane in the immediate context of large scale and expansive agricultural fields with a limited network of hedgerows and this would not change. Further agricultural fields are expansive and vast where the intervening hedgerows are absent allowing extended visibility and the middle and long distance also yields good visibility and this would not change. To the left-hand side of the view, there is a tall road-side hedgerow further collection of agricultural fields that are smaller in scale and divided by hedgerows and tree cover and this would remain a feature of the view. To the left-hand side of the view the local collection of small woodlands comprising Long Covert, Cammeringham Low Covert, Brattleby Gorse and Poplar Wood would remain as a feature of the view. The remainder of the horizon is made up of an open skyline with few vertical elements and there are distant views towards the River Trent and its associated power industry and this would not change.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Scattered native trees

Views from the B1205 Kirton Road looking north will be mitigated by the proposed scattered native trees along the southern boundary to field K1 some 500m distant. This will provide a strong structural buffer and appropriate tree planting relatively close to the built-up area of Blyton in line with character assessment objectives.

### Existing vegetation

Existing vegetation to the northeast of this viewpoint along Kirton Road will be augmented with irregular spaced native hedgerow trees species to infill tree cover and provide additional height as well as increasing the ecological value and range of species to the existing block of vegetation and hedgerows. Proposed Site fencing will sit 8m north of the existing roadside vegetation with panels set 20m from this roadside.

Additional enhancement planting will be provided to the western boundary of field K1 where it abuts the Laughton Road where additional hedgerow trees will augment the local tree cover and existing hedges will be allowed to grow out and be managed to a height of 5m where the wide road verge allows. Views to the east will be mitigated where the land falls away a little over the Site in the east.

### Successional scrub planting

Successional scrub planting, extending to 35m wide at its widest, will run north/south to the western boundary of field K3 adjoining existing vegetation and running over existing underground services. Adjacent to the road and up to the small, wooded area, the existing hedge will also be reinforced by irregularly spaced native hedgerow trees to mitigate views east from this viewpoint and from dwellings further west along Kirton Road. Site fencing will sit to the east of this scrub planting and will not be visible from the west. Further east along Kirton Road, a buffer of successional scrub planting, together with a proposed native hedge with

# Operation (Year 15)

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

The view will remain open and although the existing hedgerows to the boundary of the Site/Sites will have been managed to outgrow to a height of 5m, the changes will not be evident at this distance. New planting will have established with scattered trees beginning to provide some good cover and proposed hedges and scrub planting will be established, but again at a distance from the receptor such that the changes would be small. Close range views will therefore not change, but mid-distant views of scrub and scattered trees will help break up the immediate views with enhanced hedgerows across the Site helping to increase the tree cover. Longer distance views will be of layered vegetation of existing and proposed hedgerows with trees with a wooded horizon.

**Overall**, in terms of mitigation for the Cottam 1 Site/Sites, due to the limited network of public rights of way (PRoW) across the area the aim is to enhance the river corridors and their flood plains for their recreational importance and the Trent is the main river providing a valuable link. The Trent Valley Way in particular, provides a long-distance route. The other notable river is the upper parts of the Witham of which the River Till is a tributary. The aims are to extend the non-road network, especially where it can link people to woodlands and river corridors. Trees and hedgerows make an important contribution and improvements on approaches to villages could improve the identity of the local landscape for the benefit of recreation, particularly where associated with the PRoW network.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

### **Decommissioning**

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.



Significance of Effect	Minor <b>Not Significant</b>	Minor Not Significant	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>
Type of Effect	Adverse & Short Term	Adverse & Long Term	Neutral & Long Term	Neutral & Short Term
Magnitude	Low	Low	Very Low	Low
	Viewpoint is outside of the 0.5km study area and there would be no view of this route.  Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	hedgerow trees will augment this roadside boundary where existing vegetation is more sparce, reducing overall views of the Site from the south and west and where panels sit a little closer to the roadside. Further along Kirton Road to the east, an existing roadway will be utilized running north from the road into the Site.  Existing hedgerows Existing gaps within the roadside hedgerows to be infilled with mixed native hedgerow species. Looking south towards Cotham 3b and 2, the roadside vegetation will be retained as existing in order to maintain the open character of the views to the south.  Grassland mixes Panels will sit over a proposed wildflower grassland mix, whilst a min.  10m buffer zone around existing overhead cables will be seeded with a flower-rich pollinator mix which will also extend around proposed access/Site roads.  New hedgerows To the eastern and western boundaries of the existing buildings on the runway, mixed native hedgerows with irregular spaced hedgerow trees will augment the existing cover, provide height and help to soften both the airfield buildings and the panels from view.  Adverse effects:  Panels and structures across the landscape Increased hard standing areas Increased traffic locally Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Growth of existing and proposed vegetation is assumed to be:  Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	



Viewpoint: Lo	CC-C-E - ProW Ingh/27/2			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary The Cumulative Effects upon viewpoint LCC-C-E of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.  Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



# Viewpoint: LCC-C-F - ProW Ingh/24/1

#### **Receptor Baseline:**

This viewpoint is located on PRoW, bridleway (Ingh/24/1) looking west over the Cottam 1 North Site and southwest over the Cottam 1 South Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying almost flat landscape within the wider context of a rolling lowland at the foot of the limestone capped scarp slope. The land use is mainly productive arable farmland with many large fields under single crop. There is deciduous woodland towards the west that stands out on the horizon as a collective group, which includes Larch Plantation and New Plantation. Hedgerows enclose the fields and provide additional layering to the landscape which is crossed by farm tracks that are also prominent in the context of the adjoining hedgerows. To the north and south, the topography is varied and mainly undulating at the foot of the scarp slope with levels ranging between 20m and 30m AOD. To the west the land falls the low-lying vale at an approximate elevation of 10m to 15m AOD. To the east, the landform rises towards the settlement of Ingham to reach approximately 35m AOD. In terms of man-made elements, there is limited settlement with very few isolated farmsteads other than Greystones Farm on Willingham Road to the northwest. Other settlement is confined to the settlement of Fillingham in the north and Ingham in the south, otherwise there are very few built influences in this location.

<u>Subjective:</u> The viewpoint depicts a large-scale landscape that is open where only the areas of woodland cover to the west help to break down the scale of the landscape. New plantation and Larch Planation are present in views towards the west and Fox Covert to the southwest also. In terms of variety, the view provides a combination of features including strong hedgerows, deciduous woodland, tree clumps and hedgerow trees that give a well-balanced context to the view. In terms of colour and texture, the landscape is well-managed with muted tones that give an overall bland impression. This is a calm landscape that is simple and well-balanced with few features, however the long views towards the east capture the limestone capped ridge where the woodland at Fillingham Castle is a distinctive feature. The far-reaching views towards the west take account of the Trent floodplain and enhance the scale of the landscape.

<u>Overall:</u> The view is typical in character to the wider rolling arable landscape, which is interesting and pleasant where hedgerows and woodland add interest. The enclosed nature is only attributed to woodland cover as there are few other features to break up the landscape. There are strong contrasts in parts where wide-open views are possible that provide a greater sense of scale and these contrast with areas of intimacy that often occur close to the edges of settlements. The Bridleway is well used and the proximity to the land drain gives the route a distinctive 'sense of place'. The overall experience within this viewpoint is interesting and pleasant.

#### Receptors

This viewpoint is representative of views for horse riders and walkers using the bridleway (Ingh/24/1) that runs between Willingham Road in the north and Short Lane in the south, where it connects with the settlement of Ingham.

### **Description of View:**

The foreground of the view comprises a large gently sloping agricultural field with no hedgerows to the front part. Further agricultural fields are visible beyond since this local collection of fields has very few well-established hedgerows. The middle and long distance therefore yields some visibility across the agricultural fields towards Larch Plantation and New Plantation. To the right-hand side of the view, there is the local collection of agricultural fields set in the context of a Willingham Road and to the left-hand side of the view there is a similar collection of agricultural fields that have very little extended visibility. The remainder of the horizon is made up of hedgerows, agricultural fields, and woodlands where visibility towards the middle and long distance is evident even though there is a strong hedgerow network. There are very few vertical elements in the view.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
In terms of forces for change for LCC-C-F, there are continuing aims to plan for small new woodlands, ensuring new planting schemes take full advantage of opportunities to enhance the Unwooded Vales. The aims should also be to ensure there is consideration of the relationship between Limestone Scarps and Dipslopes and Unwooded Vales to ensure new planting does not negatively impact upon the open character of the adjoining Landscape Character Type. The pressures are centered around existing woodlands that are often small and isolated and suffer from lack of management.  Overall, the susceptibility for LCC-C-F is conditioned by the susceptibility of the Limestone Scarps and Dipslopes that rises above the Trent Vale and forms a prominent and distinctive landscape feature. The Roman roads are also a key consideration created to link London with York. Superimposed on the north south axis of the Roman road is a less dominant but nonetheless distinctive pattern of east west routes and field boundaries that add geometric character. The relevant characteristics of the landscape therefore have a moderate ability to accommodate change without undue adverse effects.	Scenic: The PROW network such as bridleway (Ingh/24/1), appeals to the visual senses due to absence of settlement and there is a remote, tranquil character to this location away from the busy road network.  Cultural: The landscape shows evidence of generally little settlement, with only the isolated farmsteads at Glebe Farm and Greystones Farm that are served by Willingham Road. The prevalent use brick in these farmsteads adds visual unity to the landscape.  Natural: There are extensive expanses of agricultural landscape, which are carefully managed, resulting in very few areas of semi natural habitat. Agricultural reservoirs are a key feature, and some are shrouded in tree cover such as the U-pond to the north of Short Lane at Ingham. Where present, this woodland gives added significance to views.  Recreation and Enjoyment: The bridleway network has a local identity, but connections are limited and often severed by the road network in most places. This location shows that Bridleway (Ingh/24/1) forms part of a wider framework to the west of Fillingham and Ingham, extending as far as Glentworth.  Local Distinctiveness and Sense of Place: The landscape has a limited 'sense of place' due to its productive and utilitarian character, however this bridleway (Ingh/24/1) is open along some of its route with few hedgerows, which creates expansive views and this is the local distinctiveness of the route.  Health and Wellbeing: The Unwooded Vales Character Area 4a provides limited areas for recreation due to the distinct lack of PRoW, but this location linking with the other bridleways to the north is well-provided for.  Important Spatial Function: The landscape benefits from the high level of visual unity from the extensive arable land use and sparse settlement to interrupt the skyline.  Overall, the value of Viewpoint LCC-C-F is shaped by its a geometric modern landscape of planned enclosure and modern field systems. There is some time depth associated with the presence of the isolated farmsteads, and the remote tranqui	Range of Features: This location comprises the public bridleway network to the northwest of the edge of the settlement of Fillingham. This is an open location where there is an absence of hedgerows. There is a limited range of features confined to woodland cover and the minor tributary of the River Till.  Importance of View: This is an open location on the public bridleway network that connects in an almost north south direction between Ingham and Willingham Road, which slightly raises the level of importance of the view. The view is influenced by the presence of the combination of features, but they are only experienced in the distant context of the Unwooded Vales Character Area 4a.  Number of Receptors: This is the public bridleway network that almost connects the settlements of Ingham and Glentworth via Fillingham. This route is likely to appeal more to local users than those from a wider area.	Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:  Panels to be set a minimum of 15m from adjacent PRoW.  Panels to be set a minimum of 50m from adjacent residential property boundaries.  Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.  Panels to be set a minimum of 3m from Site boundaries.  Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.  Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.  The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.
High	Medium	Medium to High	





# **Viewpoint: LCC-C-F - ProW Ingh/24/1**

Construction

# Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering the Site/Sites. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the foreground vegetation would provide some screening such that these activities would be confined to a narrower

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

section of the view.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and east of Thorpe Lane.

# **Operation (Year 1)**

The foreground of the view comprises a large gently sloping agricultural field with no hedgerows to the front part and this would not change, thus retaining the open character of the view. Further agricultural fields are visible beyond since this local collection of fields has very few well-established hedgerows and they would remain visible but with the panel areas occupying a narrow section of the view. The middle and long distance also yields some visibility across the agricultural fields towards Larch Plantation and New Plantation and this would not change. To the right-hand side of the view, there is the local collection of agricultural fields set in the context of a Willingham Road and this would not alter. To the left-hand side of the view there is a similar collection of agricultural fields that have very little extended visibility, but they would not change. The remainder of the horizon is made up of hedgerows, agricultural fields and woodlands where visibility towards the middle and long distance is evident even though there is a strong hedgerow network that would help with layering and the integration of the panels into the landscape.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Native scattered tree blocks

To the north of field C28 and along the eastern boundary of C23 down to C24, a belt of native scattered trees will form a strong feature and provide visual interest and variation along this part of the Site, mitigating views from the east and the southeast.

### Shelterbelt planting

Shelterbelt planting is proposed to the northern boundaries of C14 and C17 with additional planting to the western boundary of C14 to link Larch Plantation to New Plantation creating both visual and ecological links.

Introduce shelterbelt planting to the eastern boundary of fields C23, C24 and C25 to further mitigate any possible view from the bridleway.

Shelterbelt planting running generally west/east across the Site adjacent to Larch Plantation will link this woodland with the surrounding landscape both visually and in terms of creating valuable ecological networks.

A further block of shelterbelt planting is proposed to the eastern boundaries of C24 and C25 to mitigate views from the east and from the village of Ingham.

### New Hedgerows

A proposed new hedgerow with irregularly spaced hedgerow trees is proposed to the eastern boundary of the Site at this viewpoint to the east of fields C29 and 30. Proposed new hedges will follow existing ditch/tree lines to field boundaries running north/south, between fields C20,22 and 27 helping to reinforce the field structure and create visual links as well as breaking up the overall bulk of the panelled area. A new hedgerow to the north of C27 and 29 will mitigate views from further north.

Provide new hedgerow to the eastern boundaries of fields C29 and C30 to mitigate views from the bridleway.

### **Existing hedgerows**

Where existing hedgerows exist across the Site running broadly north/south, these will be enhanced and planted with irregularly spaced native hedgerow trees to break up the somewhat open and exposed landscape. Reinforcement of existing hedgerows will

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, views to the west of the Site will be screened in the mid-range through the planting of the proposed native hedges, shelterbelts and enhancement of existing boundaries which will be managed to a height of 5m, both formally strengthening the existing and historical field pattern and creating a multi-layered landscape. Scattered tree blocks to the west will reinforce the route of existing watercourses and provide a strong buffer to the eastern boundary of the closest area of panels. Views of the longer distance, where hedgerows to not block these, will be of a layered, well treed lands cape with a backdrop of wooded vegetation in places on the horizon. Both new and existing vegetation will have established and begun to mature creating a strong structure to the landscape and reducing the exposed feel of the area whilst retaining its overall

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

# **Decommissioning**

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning includes site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.



		strengthen the overall character and create more of a well-treed scene locally and from	Existing hedgerows: 0.9m at Year 1 and 5m at Year	
	Construction Access	further afield.	15.	
	There would be no view of any			
	construction access from this	Grassland Mixes	Shrubs: 0.9m at Year 1 and 5m at Year 15.	
	viewpoint.	Planting along the PRoW (bridleway) is to be a tall herb mix providing a scenic walk/ride		
		along this section of the route. This mix flows round to the west and along the southern		
	Cable Route/s	border of fields C22, 27 and 30, providing a good open buffer around the existing ditch		
	Viewpoint is outside of the 0.5km	and small pond.		
	study area and there would be no			
	view of this route.	Flower rich pollinator mixes and tussock mixes are proposed around existing and		
		proposed hedgerows elsewhere within the Site with pollinator mixes concentrated on the		
	Substation	south and west facing hedgerow verges.		
	This viewpoint is within the 2km			
	study area but there would be no	Adverse effects:		
	view of the Substation at Cottam 1.	<ul> <li>Panels and structures across the landscape</li> </ul>		
		<ul> <li>Increased hard standing areas</li> </ul>		
		<ul> <li>Increased traffic locally</li> </ul>		
		<ul> <li>Some minor light pollution within open countryside</li> </ul>		
		<ul> <li>Substation, Battery storage and other associated infrastructure structures visible</li> </ul>		
		above existing vegetation		
Magnitude	Low	Low	Very Low	Low
Type of	Advance O Chart Tama	Advance O Lagra Tama	November 10 1 and Towns	Navitual C. Chart Taura
Effect	Adverse & Short Term	Adverse & Long Term	Neutral & Long Term	Neutral & Short Term
Significance	Minor <b>Not Significant</b>	Minor Not Significant	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>
of Effect				



Viewpoint: LCC-C-F - ProW Ingh/24/1				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.		In Summary  The Cumulative Effects upon viewpoint LCC-C-F of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.		
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1</b> [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



# Viewpoint: LCC-C-M - Kexby Road

#### **Receptor Baseline:**

The view is located along Kexby Road, looking southwest towards the northern extent of the Cottam 1 North Site with the Cottam 1 South Site beyond. The view is also looking northwest towards the Cottam 2 Site.

Objective: This viewpoint offers views of a very gently rolling landscape within the context of a broad valley that is almost conspicuous at this location. The land use is predominantly arable with mixed woodland comprising Nursery Plantation to the east, and to the south woodland cover on the far horizon at Fillingham Grange and The Lake, and Fillingham is a strong dark feature. The views towards the far horizon are curtailed by the landform in the foreground. Tree clumps are also a feature along the hedgerow boundaries, which enhance the existing woodlands and give the impression of a more intimate landscape. In terms of man-made elements, there is little built influence since the landscape is sparsely populated with only a few isolated dwellings and grange houses.

<u>Subjective:</u> The viewpoint depicts a medium to large-scale, partially open landscape, with views closed down by a wooded horizon. The intensive arable land use opens visibility, but the landform and strong hedgerows with tree clumps help to dissipate the scale. In terms of variety, the combination of features includes woodland, tree clumps and hedgerows that present a simple landscape with very limited interest. In terms of texture, this is a highly managed arable land use with a muted colour combination and very few far-reaching views.

<u>Overall:</u> The views from the road focus on the large, open arable fields where the intervening woodland and settlement at Fillingham closes down views towards the south. The immediate view is typical of the local landscape character, but the far-reaching open views offer more interest. The overall experience is pleasant but with some bland foreground features.

#### **Receptors:**

This viewpoint is representative of views available to users of Kexby Road. This section of the road is used by walkers and horse riders and leads from Spitals Farm and Westlands Farm in the west to join the B1398 in the east at Glentworth. There are no meaningful views towards the Site/Sites due to distance, topography, and intervening layering of woodlands, hedgerows, and tree clumps. There are no meaningful views towards the Site/Sites due to distance, topography, and intervening hedgerows.

### **Description of View:**

The foreground of the view comprises of Kexby Road set in the context of an open and expansive agricultural landscape with hedgerows to only one side of the road. Further agricultural fields are visible beyond since this local collection of fields has very few well-established or mature trees. There are also no intermittent residential properties and farmsteads to close down views towards the outlying landscape. The middle and long distance therefore yields open visibility across the agricultural fields towards the south and southwest. To the right-hand side of the view, there is a similar collection of large-scale agricultural fields. The remainder of the horizon is made up of limited hedgerows, agricultural fields and woodlands where visibility towards the middle and long distance is hardly evident apart from the River Trent and its associated power industry.



Not Applicable



Medium to High

Medium

[Reference: Linototoss/Aff/Co.s.o.s.2.4.5_A] january 202				
Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation	
In terms of forces for change for VP35, there is	Scenic: This region represents a major east-west link,	Range of Features: This location comprises the local road network	Embedded Mitigation would be taken into account at the	
homogenization of the landscape and loss of	connecting Lincolnshire with the North of England and	at the point where it forms a gateway to the settlement. This is an	construction, operation (Year 1 and Year 15) and	
hedgerows. However, there is an opportunity to	the minor road network offers views over a local	open location where the low-cut hedgerows allow expansive views	decommissioning stages of the Scheme. This Embedded	
reinforce landscape character and build in more	landscape that is, in parts, scenic with pleasant views.	across the arable landscape. Small woodland blocks and riparian	Mitigation is also referred to as primary mitigation and	
diversity across the area especially in terms of	The network of linking local lanes are also important	vegetation lining the small tributaries of the River Till also add	would include the following measures:	
improvements to hedgerows but also in changing the	places to capture views.	some structure to the landscape but do little to close down		
proportion of conifer to broadleaved woodland and		visibility. The hedgerows, the woodland cover, the riparian	Panels to be set a minimum of 15m from adjacent PRoW.	
improvements to woodland edge species.	<u>Cultural:</u> The close proximity to Gainsborough as a	vegetation, and the scattered farmsteads are the range of features		
	major historic crossing on the River Trent to the west	in the view. The powerful River Trent and its tributaries and other	Panels to be set a minimum of 50m from adjacent residential	
Occupally the acceptability for VP25 is any distingted by the	and the strategic location of Roman roads on the	water courses within its flood plain provide a strong functional	property boundaries.	
<b>Overall</b> , the susceptibility for VP35 is conditioned by the	limestone capped scarp slope to the east give rise to a	feature running through the landscape, which contribute strongly	D	
striking differences across the varying elements of the	number of historic settlements in the intervening	to the 'sense of place' where the local tributaries support riparian	Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.	
AGLV and that these can be appreciated across the	landscape. This includes Glentworth and Glentworth	vegetation.	and minimum of 8m from minor watercourses.	
landscape. There is an opportunity to use landscape mitigation to build upon these differences and bolster	Conservation Area to the east.	Importance of View: This is an open location at a point where the	Panels to be set a minimum of 3m from Site boundaries.	
this landscape diversity. Particular areas for focus	Natural: The local roads are valuable wildlife corridors	local road network forms a gateway to the settlement. This local	Pariels to be set a minimum of sin from site boundaries.	
include the proportion of pasture to arable fields in	since they are often narrow country lanes with grass	lane connects Kexby with Glentworth and plays a part in the east	Existing hedges are to be allowed to grow out and will be	
particular those around the edges of settlements which	verges, hedgerows to both sides and high levels of	west connections across the area, which slightly raises the level of	managed to a height of 5m. Hedgerow trees will be	
are particularly important to their setting and form a	tranquility.	importance of the view. The view is influenced by the presence of	encouraged to grow out to add further thickening and growth	
subtle relationship. Within this AGLV, views are	tranquinty.	the combination of features but the absence of hedgerows along	to the field boundaries with the addition of new hedgerow	
generally contained by tall hedgerows, woodlands, and	Recreation and Enjoyment: The east west travel	this section of the road enhances the open visibility.	trees as appropriate, randomly spaced along the length of	
tree groups, giving the landscape very limited capacity	direction of local lanes often links the older	The second of th	existing hedges.	
to accommodate change. The relevant characteristics	settlements moving in a more random pattern	Number of Receptors: This is the local road network that connects		
therefore have a limited susceptibility to accommodate	following minor roads. These roads such as Kexby	the settlements of Kexby and Glentworth. This route is likely to	Lighting will be limited to downlights within substations and	
change without undue adverse effects. There are	Road are popular for recreation since they provide	appeal both to local users and those from a wider area as it forms	battery banks only and used when maintenance or security is	
however robust hedgerows with smaller fields and	attractive destinations as narrow country lanes.	part of the east west connecting local lanes. The strategic major	required. Lighting will be PIR operated and will be calibrated	
many trees in these locations that assist with mitigation.		road network is defined by important historic routes (north south)	to vehicle and personnel movements. All visible lighting	
	Local Distinctiveness and Sense of Place: The landscape	and the strategic minor road network (east west) also links a	would be 50W, installed at a maximum height of 4m with	
	associated with Kexby Road derives the 'sense of place'	number of historic and distinctive smaller string of settlements	cowls fitted to prevent light spillage. Lighting required within	
	from the woodland blocks that contrast with the	across the area.	panelled areas will be manually operated. There will be no	
	intensive arable landscape. These woodland blocks		lighting on perimeter fencing.	
	feature at 'right-angled' bends in the road and include			
	Big Wood and Heaton's Wood.		The visual effects <b>with only</b> the Embedded Mitigation taken	
			into account equate to those effects set out for the operation	
	Health and Wellbeing: Main roads are significant		stage (Year 1) and this includes secondary mitigation which	
	features in this landscape, but the minor road		will have been carried out but will have had limited physical	
	networks and their connecting bridleways are often		or visual impact at this Embedded Mitigation stage.	
	refuges of tranquility bringing benefits for health and			
	wellbeing.			
	Important Spatial Functions The local roads play an			
	Important Spatial Function: The local roads play an important role in wayfinding by linking several historic			
	and distinctive smaller string of settlements with the			
	PRoW network.			
	TROW HOLWORK			
	<b>Overall</b> , the value of Viewpoint LCC-CM is shaped by			
	the local roads (that gain access to smaller villages)			
	which are popular for informal recreation. These local			
	roads provide attractive destinations as narrow			
	country lanes often with good levels of tranquility and			
	isolation. Many of these roads, such as Kexby Road,			
	also have open sections with no hedgerows and views.			

Medium to High





# Viewpoint: LCC-C-M - Kexby Road

### Construction Op

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Thorpe Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the riparian vegetation bordering the River Till would provide some screening such that these activities would be confined to a narrower section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and east of Thorpe Lane.

#### **Construction Access**

Viewpoint will not be affected by construction traffic due to the distance between the viewpoint and the proposed construction access.

### **Cable Route Corridor**

Viewpoint is outside of 0.5km study area.

### **Substation**

# Operation (Year 1)

The foreground of the view comprises Kexby Road set in the context of an open and expansive agricultural landscape with hedgerows to only one side of the road. Further agricultural fields are visible beyond since this local collection of fields has very few wellestablished or mature trees. There are also no intermittent residential properties and farmsteads to close down views towards the outlying landscape. The middle and long distance therefore yields open visibility across the agricultural fields towards the south and southwest. To the right-hand side of the view, there is a field hedgerow with woodland and tree cover that breaks down the agricultural fields. To the left-hand side of the view there is a similar collection of large-scale agricultural fields. The remainder of the horizon is made up of limited hedgerows, agricultural fields and woodlands where visibility towards the middle and long distance is hardly evident apart from the River Trent and its associated power industry.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Scattered tree belt

A strong belt of scattered trees is proposed to the east of field B1, providing a solid feature in this somewhat exposed landscape. This buffer of riparian vegetation adjacent to the watercourse will add height and structure to the landscape and enhance this natural ditchline. This will also help to mitigate views further west and to some degree to the south.

A block of scattered trees is also proposed to the norther boundary of field A3 adjacent to a field of bird mitigation to the south. This will provide a strong block of trees which will flow into the views of Fillingham Low Wood when viewed from the north on Kexby Road.

### <u>Shelterbelt</u>

Shelterbelt planting the north of North Farm will further enhance the woodland cover in this area and mitigate views.

#### Existing hedges

Existing hedges to the north of fields B2, B3 and B4 are low cut and would benefit from enhancement to ensure that Site/Sites is screened from this view, although the land falls away to the west and predominantly obscures views, even with low cut hedges, there are views of the ground level in some

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, views southwest towards the Site will be screened in the close-mid-range through the enhancement of existing low hedges which will be managed to a height of 5m. The addition of hedgerow trees will further mitigate views. In the middle distance, new and augmented hedgerows will provide a series of good quality hedgerows both formally strengthening the existing and historical field pattern and creating a multilayered landscape, but views down towards the valley are predominantly obscured from this viewpoint. Views of the longer distance, where hedgerows do not block these, will be of a layered, well treed landscape with a backdrop of wooded vegetation in places on the horizon. Both new and existing vegetation will have established and begun to mature creating a strong structure to the landscape and reducing the exposed feel of the area whilst retaining its overall open character. This exposed area will appear less vast in places, whilst open views across the valley will also be retained.

Mid-distance views towards the Site of Cottam 1 North and south with the Cottam 2 Site to the northwest with slightly undulating landscape down to the valley with intervening field boundaries visible. The viewpoint sits on an exposed area with long distance views to the west with shorter views east.

Overall: The aim for Cottam 1 should be to plan new woodland in the most suitable locations. This may include in and around settlements, where woodland would help integrate new development into the landscape and in more intimate low-lying areas, where woodland would help create a mixed pattern of land use. Consideration should also be given to the management of existing trees and woodland, enhancing biodiversity value and age structure through new planting and the creation of woodland edge habitats. An increase in grassland reversion should also be encouraged, increasing the occurrence of semi-natural habitats.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape

## Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.



	This viewpoint is within the 2km study area and there is likely to be a distant view of the Substation at Cottam 1 between this view and the Power Station.	places. Hedgerow trees will enhance the view from this road.  The eastern boundary of field B4 will also be enhanced, and existing hedges will be allowed to grow out. The addition of irregularly spaced hedgerow trees will help to soften this rather exposed landscape and create a more varied scene where this location is rather devoid of height. The inclusion of trees will also add height to boundaries helping to mitigate potential views by horse riders.  New hedges  A new hedge is proposed to the south of fields B2 and B3, mitigating views from the south and providing further screening to the remainder of the Cottam North Site. The addition of hedgerow trees will enhance the character locally and help to strengthen the historical field pattern locally.  Further west, a new hedge with hedgerow trees is proposed to the eastern boundary of fields A1 and A4, mitigating any views from the northeast of this block of panels and those further southwest.  Grassland mixes  Two 10m belts of tall herb mix are proposed around the existing ditches that run north/south through fields B1 and B3/4. This provides a buffer to the watercourses and creates added mosaic of vegetation where no hedge exists.  Flower rich pollinator mixes are used around the existing track, around all field margins in this area as well as a large block in field B1 creating a strong visual base layer and ecological benefits within the surrounding agricultural landscape.  Adverse effects:  Panels and structures across the landscape Increased hard standing areas Increased traffic locally Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	- Improved (more natural) management of exiting vegetation - Less expanse of intensively managed arable land - A less exposed and windswept landscape - Water quality improvements - Potential animal grazing - Reinstatement of historic field patterns - Bird mitigation fields - Significantly improved biodiversity  Growth of existing and proposed vegetation is assumed to be:  Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	
Magnitude	Low	Low	Very Low	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Neutral & Long Term	Neutral & Short Term
Significance of Effect	Minor <b>Not Significant</b>	Minor Not Significant	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint: LCC-C-M – Kexby Road				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to the intervening		In Summary The Cumulative Effects upon viewpoint LCC-C-M of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited		
		impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.		
	vegetation along the mainline railway and additional intervening settlement,	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
	hedgerows, and tree cover. Therefore, there no in combination visual effects are anticipated.	There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape		
		Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



## Viewpoint: LCC-C-N - Glentworth Road

#### **Receptor Baseline:**

The view is located on Glentworth Road close to the junction with Gypsy Lane, looking southwest towards the northern extent of the Cottam 1 North Site with the Cottam 1 South Site beyond. The view is also looking north towards the Cottam 2 Site.

Objective: This viewpoint offers views over a very gently rolling landscape within the wider context of a broad valley that is only partly conspicuous at this location. The land use is predominantly arable with mixed woodland visible to the southeast (left of view) comprising Turpin Wood and Fillingham Low Wood, and to the south woodland cover on the horizon at Moor Bridge is a strong feature. The views towards these strong woodland blocks are a key feature within the landscape. In terms of man-made elements, there is little built influence since the area is sparsely populated and the road network only comprises the 'dog-leg' alignment of Glentworth Road that links Glentworth in the east with Kexby in the west. There is also Gypsy Lane, which is a local track that passes over Gypsy Lane Bridge.

<u>Subjective:</u> The viewpoint depicts a medium-scale, partially enclosed landscape, intimate in parts with strong blocks of woodland, and with far reaching views towards the distant horizon as far as Fillingham Castle and Fillingham Park in the east. In terms of variety, the combination of features includes isolated farm buildings, deciduous woodland, plantation woodland, hedgerows and hedgerow trees that present a highly appealing and well-balanced composition, with very few detractors. In terms of texture, this is a well-managed arable land use with a good depth of colour giving the impression of a very interesting landscape.

<u>Overall:</u> The views towards the woodland blocks and the 'dog-leg' bends in Glentworth Road are a distinctive feature. The presence of tall, foreground hedgerows close down visibility and there are also several hedgerow trees including ash that diminish the sense of scale and add intimacy to these roads. There are also wide, grass verges that add further stimulus to the landscape. The immediate view is typical of the local landscape character that well-wooded and attractive with wide grass verges and the far-reaching open views are consistent with the wider landform characteristics of the area. The overall experience is very pleasant with some interesting and invigorating features.

#### **Receptors:**

This viewpoint is representative of views available to users of Glentworth Road, that leads from Glentworth in the east to join the settlement of Willingham by Stow in the west. There are no meaningful views towards the Site/Sites, due to distance, topography and intervening layering of hedgerows and woodland blocks.

#### **Description of View:**

The foreground of the view comprises of Glenworth Road set in the context of an open and expansive arable landscape with hedgerows to each side of the road. Further agricultural fields are visible beyond since this local collection of fields has very few well-established or mature trees. There are also no intermittent residential properties and farmsteads (apart from isolated farm buildings) to close down views towards the outlying landscape. The middle and long distance therefore yields open visibility across the agricultural fields in all directions. To the right-hand side of the view, there is a field hedgerow with an open arable field and then distant woodland. To the left, larger blocks of tree cover break down the agricultural fields and help close down views across the landscape.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
In terms of forces for change for LCC-C-N, there is homogenization of the landscape and loss of hedgerows. However, there is an opportunity to reinforce landscape character and build in more diversity across the area especially in terms of improvements to hedgerows but also in changing the proportion of conifer to broadleaved woodland and improvements to woodland edge species.  Overall, the susceptibility for LCC-C-N is conditioned by the striking differences across the varying elements of the AGLV and that these can be appreciated across the landscape. There is an opportunity to use landscape mitigation to build upon these differences and bolster this landscape diversity. Particular areas for focus include the proportion of pasture to arable fields in particular those around the edges of settlements which are particularly important to their setting and form a subtle relationship. Within this AGLV, views are generally contained by tall hedgerows, woodlands, and tree groups, giving the landscape very limited capacity to accommodate change. The relevant characteristics therefore have a limited susceptibility to accommodate change without undue adverse effects. There is however robust hedgerows with smaller fields and many trees in these locations that assist with mitigation.	Scenic: This region represents a major east-west link, connecting Lincolnshire with the North of England and the minor road network offers views over a local landscape that is, in parts, scenic with pleasant views. The network of linking local lanes (especially where they link with bridleways) are also important places to capture views.  Cultural: The close proximity to Gainsborough as a major historic crossing on the River Trent to the west and the strategic location of Roman roads on the limestone capped scarp slope to the east give rise to a number of historic settlements in the intervening landscape. This includes Glentworth and Glentworth Conservation Area to the northeast.  Natural: The local roads are valuable wildlife corridors since they are often narrow country lanes with grass verges, hedgerows to both sides and high levels of tranquility.  Recreation and Enjoyment: The east west travel direction of local lanes often links the older settlements moving in a more random pattern following minor roads. These roads such as Kexby Road are popular for recreation since they provide attractive destinations as narrow country lanes.  Local Distinctiveness and Sense of Place: The landscape associated with Kexby Road derives the 'sense of place' from the woodland blocks that contrast with the intensive arable landscape, but the minor road networks and their connecting bridleways are often refuges of tranquility bringing benefits for health and wellbeing.  Important Spatial Function: The local roads play an important role in wayfinding by linking several historic and distinctive smaller string of settlements with the PROW network.  Overall, the value of Viewpoint LCC-C-N is shaped by the local roads (that gain access to smaller villages) which are popular for informal recreation. These local roads provide attractive destinations as narrow country lanes often with	Range of Features: This location comprises the local road network at the point where it makes a 'dog-leg' turn. This is an open location where the tall hedgerows, small woodland blocks and riparian vegetation lining the small tributary of the River Till add some structure to the landscape and close down some visibility. The hedgerows, the woodland cover and the scattered farmsteads are the range of features in the view. The powerful River Trent and its tributaries and other water courses within its flood plain provide a strong functional feature running through the landscape, which contribute strongly to the 'sense of place' where the local tributaries support riparian vegetation.  Importance of View: This is an open location at a point where the road takes a 'dog-leg' turn, which slightly raises the level of importance of the view. The view is influenced by the presence of the combination of features but the low-cut hedgerows along this section of the road enhance the open visibility across the area.  Number of Receptors: This is the local road network that connects the settlements of Kexby, Upton and Glentworth. This route is likely to appeal to local users and those from a wider area as it forms an east-west connection between the north-south routes. The strategic major road network is defined by important historic routes (north south) and the strategic minor road network also links several historic and distinctive smaller string of settlements (east west) across the area.	Embedded Mitigation  Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:  Panels to be set a minimum of 15m from adjacent PRoW.  Panels to be set a minimum of 50m from adjacent residential property boundaries.  Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.  Panels to be set a minimum of 3m from Site boundaries.  Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.  Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.  The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.
	good levels of tranquility and isolation. Many of these roads, such as Kexby Road, also have open sections with no hedgerows that allow views across the landscape.		
Medium	Medium	Medium	Not Applicable





# Viewpoint: LCC-C-N - Glentworth Road

## Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Thorpe Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the riparian vegetation bordering the River Till would provide some screening such that these activities would be confined to a narrower section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and east of Thorpe Lane.

#### **Construction Access**

Viewpoint will not be affected by construction traffic due to the distance between the viewpoint and the proposed construction access.

### **Cable Route Corridor**

Viewpoint is within 0.5km study area and will experience effects at construction stage.

### Operation (Year 1)

The foreground of the view would not change and comprise Glenworth Road set in the context of an open and expansive arable landscape with hedgerows to each side of the road. Further agricultural fields are visible beyond and this would not change where the fields are expansive and the well-established or mature trees do not play a significant role. The middle and long distance would continue to yield open visibility across the agricultural fields in all directions. To the right-hand side of the view, there is a field hedgerow with an open arable field and then distant woodland, which would not change. To the left, larger blocks of tree cover break down the agricultural fields and help close down views across the landscape and this would help mitigate the presence of the panel areas in the landscape.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

### Scattered tree belt

A belt of scattered trees will run north/south from the northern boundary of field C3 connecting a lone field tree.

#### Shelterbelt

Shelterbelt planting across the Site running broadly east/west will provide a strong boundary definition along the existing watercourse with riparian vegetation linking existing blocks and reducing views across the Site to the south/north.

### Existing hedges

Enhanced hedgerows are proposed to fields C15 and C18 with the addition of hedgerow trees. These boundaries are to be allowed to grow out and managed at 5m to further mitigate more distant views of the Site to the southwest.

Enhanced vegetation either side of Willingham Road will help to strengthen these boundaries and reduced views south across the Site, especially to horse riders.

The northern boundary of field A1 is to be augmented with the existing hedge infilled as necessary and to be allowed to grow out and managed to a height of 5m. Proposed hedgerow trees will be added as necessary to mitigate views and to help link the blocks of woodland, further enhancing the local character.

### New hedges

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, views southwest towards the Site will be screened in the close-mid-range through the provision of new hedgerows which will be managed to a height of 5m. The addition of hedgerow trees will further mitigate views. Views of the longer distance, where hedgerows to not block these, will be of a layered, well treed landscape with a backdrop of wooded vegetation in places on the horizon. Both new and existing vegetation will have established and begun to mature, creating a strong structure to the landscape with many field boundaries augmented and new vegetation flowing into the existing woodland across the scene.

Overall: The aim for Cottam 1 should be to plan new woodland in the most suitable locations. This may include in and around settlements, where woodland would help integrate new development into the landscape and in more intimate low-lying areas, where woodland would help create a mixed pattern of land use. Consideration should also be given to the management of existing trees and woodland, enhancing biodiversity value and age structure through new planting and the creation of woodland edge habitats. An increase in grassland reversion should also be encouraged, increasing the occurrence of semi-natural habitats.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

# **Decommissioning**

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.



	Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	New hedges to parts of the northern boundary of field C3 where these are missing along the boundary. Field C9 also requires a new hedgerow to the northern boundary with these hedgerows containing irregularly spaced native hedgerow trees to augment the tree cover locally and enhance the overall character whilst providing further screening to the Site beyond  New boundaries to the east and part of the west are proposed to further enhance the field structure in this area, mitigate views around Turpin's Bungalows and increase the tree cover locally.  Successive scrub  Blocks of successive scrub are proposed around the boundaries of the woodland blocks and vegetation adjacent to Gypsy Lane, (fields C3 and C5) creating a strong layered effect to this vegetation and integrating it into the grassland beyond.  Grassland mixes  Adjacent to existing hedgerows and proposed blocks of scattered trees, a tussock grass mix is proposed with a wildflower grass mix under the proposed panels. Areas of flower rich pollinator mix are proposed around other south and west facing field boundaries as well as a 40m buffers around Turpin's Bungalows.  Adverse effects:  Panels and structures across the landscape Increased hard standing areas Increased traffic locally Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	
10 11			Very Low	
Magnitude	Low	Low	Very Low	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Neutral & Long Term	Neutral & Short Term
Significance of Effect	Minor <b>Not Significant</b>	Minor Not Significant	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint: L	Viewpoint: LCC-C-N – Glentworth Road			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there	In Summary The Cumulative Effects upon viewpoint LCC-C-N of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.		
	no in combination visual effects are anticipated.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



# Viewpoint: LCC-C-P - Corringham Beck

#### **Receptor Baseline:**

This viewpoint is located on the unnamed road to the northeast of Corringham, looking directly east over the Cottam 2 Site and south towards the Cottam 1 North Site. The view is also looking north towards the Cottam 3b Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising the low-lying, almost flat landscape within the wider context of a rolling broad valley, which is conspicuous in this view. The land use is mainly productive arable farmland with many large fields under single crop. There is deciduous woodland concentrated around Hall Farm and Old Hall to the southwest and further tree cover along Corringham Beck. The topography is mainly flat with some variation to the west of Corringham where the landscape rises towards Mill Farm and its associated windmill at approximately 23m AOD. To the southeast, the landform rises in a similar way to form the setting for Corringham Windmill at approximately 20m AOD. In terms of man-made elements, there are views towards Corringham Grange Farm and The Cottage, which are within the Site/Sites (outside RLB). There are also residential properties at Hall Farm and Old Hall giving the location a settled appearance. Masts and poles are also evident in the view.

<u>Subjective:</u> The viewpoint depicts a medium to small-scale, open landscape, being exposed due to the large field sizes and the limited hedgerow network. In terms of variety, the combination of features includes farmsteads, residential properties, low cut hedgerows, deciduous woodland blocks and hedgerow trees. In terms of colour and texture, the open arable landscape is broken up by hedgerows and tree clumps which adds interest.

<u>Overall:</u> The unnamed road is a feature in the context of its grass verges, and the wider outlook is interesting with views extending east towards the limestone capped scarp slopes. Where there are distant views towards the skyline, they are often punctured by telegraph poles which appear dominant and consistent on the horizon. There is limited tree cover around Aisby to the north and therefore the residential properties stand out in the landscape. The overall experience is a calm and intact landscape, but the presence of poles and other man-made features exert a detracting influence. This is a quiet location with very little passing traffic.

## **Receptors:**

The viewpoint is representative of views for users of the unnamed road to the east of Corringham.

## **Description of View:**

The foreground of the view comprises Field Farm Lane set in the context of an open and expansive arable landscape with hedgerows to each side of the road. Further agricultural fields are visible beyond since this local collection of fields has very few well-established or mature trees. There are also no intermittent residential properties and farmsteads with large scale farm buildings that close down views towards the settlement of Corringham. The middle and long distance therefore yields open visibility across the agricultural fields in all directions. To the right-hand side of the view, there is a field hedgerow with an open arable field and then distant woodland at Corringham Scroggs. To the left, there is some intermittent tree cover along Fields Farm Lane that helps break down the views across the landscape at this particular location and gives a local feeling of enclosure, otherwise the location is exposed.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
In terms of forces for change for LCC-C-P, there are aims to protect the open and unsettled character of the landscape from inappropriate development and that tree planting around settlement fringes can help with integration and help contribute to the overall perception of a well treed landscape. The changes from flood risk and engineered solutions are also changing the landscape, but there is potential for landscape restoration projects to assist with mitigation of this change. The potential for river landscape to change is also a key consideration, but there is potential to introduce positive landscape interventions such as biodiversity and nature conservation initiatives. The impact on long distance views from surrounding towns and villages is also a key consideration.  Overall, the susceptibility for LCC-C-P is conditioned by the impact of settlement on the edges of the river floodplain, the interventions associated with flood risk, the shifting of river channels, sand and gravel extraction and power and energy infrastructure. There are however also significant benefits to be gained from a range of landscape and biodiversity interventions such as restoration projects.	Scenic: The road network such as those to the east of Corringham appeals to the visual senses due to adjacent farmsteads at Hall Farm and Old Hall and their tree cover. There is a remote character to this location away from the centre of the village.  Cultural: The landscape shows evidence of generally little settlement, other than Corringham.  Natural: There are extensive expanses of agricultural landscape, which are carefully managed, resulting in very few areas of semi natural habitat.  Recreation and Enjoyment: The footpath network has a local identity, but connections are limited and often severed by the road network in most places. This location shows that footpath (Corr/22/1) forms part of a framework of Corringham but with limited connections to the outlying landscape.  Local Distinctiveness and Sense of Place: The landscape has a limited 'sense of place' due to its productive and utilitarian character, however footpath (Corr/22/1) is open along some of its route with few hedgerows, which creates expansive views, and this is the local distinctiveness.  Health and Wellbeing: The Unwooded Vales Character Area 4a provides limited areas for recreation due to the distinct lack of PROW, and this location linking with Corr/22/1 is not well-provided for.  Important Spatial Function: The landscape benefits from the high level of visual unity from the extensive arable land use and sparse settlement to interrupt the skyline.  Overall, the value of Viewpoint LCC-C-P is shaped by its a geometric modern landscape of planned enclosure and modern field systems. There is some time depth associated with the presence of the isolated farmsteads, and the remote tranquil character is a feature of the view, otherwise the landscape presents a simple palette of land uses and features.	Range of Features: This location comprises the local road network at the edge of a small settlement. This is an open location where the low-cut hedgerows, built form and woodland cover limit views across the area. The hedgerows and woodland cover at Hall Farm and Old Hall are evident but otherwise there is a limited range of features in the view.  Importance of View. This is an intimate location on the local road network at the edge of a small settlement, which dilutes the level of importance of the view. The view also has a combination of features and the sequence of views across the area towards woodlands that form the approaches to settlements are locally important features.  Number of Receptors: This is the local road network at the edge of a small settlement. This route is likely to appeal to local users and those from a wider area may be limited due to this being a small settlement and minor roads.	Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:  Panels to be set a minimum of 15m from adjacent PRoW.  Panels to be set a minimum of 50m from adjacent residential property boundaries.  Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.  Panels to be set a minimum of 3m from Site boundaries.  Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.  Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.  The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.
Medium	Medium	Medium	Not Applicable





# **Viewpoint: LCC-C-P - Corringham Beck**

# Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Thorpe Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the riparian vegetation bordering the River Till would provide some screening such that these activities would be confined to a narrower section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and east of Thorpe Lane.

## **Construction Access**

The viewpoint will not be affected by construction traffic in the foreground due to the distance between the viewpoint and the proposed construction access. In the far distance towards Corringham Grange Farm tall vehicles will be in view.

## **Cable Route Corridor**

# Operation (Year 1)

The foreground of the view comprises Field Farm Lane set in the context of an open and expansive arable landscape with hedgerows to each side of the road. Further agricultural fields are visible beyond since this local collection of fields has very few well-established or mature trees. There are also no intermittent residential properties and farmsteads with large scale farm buildings that close down views towards the settlement of Corringham. The middle and long distance therefore yields open visibility across the agricultural fields in all directions. To the right-hand side of the view, there is a field hedgerow with an open arable field and then distant woodland at Corringham Scroggs. To the left, there is some intermittent tree cover along Fields Farm Lane that helps break down the views across the landscape at this particular location and gives a local feeling of enclosure, otherwise the location is exposed.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A scattered tree belt is proposed to the northern boundary of field H1 adjacent to The Cottage reducing views southeast from the unnamed road near Corringham Beck. This belt will also provide additional height and structure to this area which is currently somewhat exposed to the east with low cut existing hedgerows.

A further strong belt of riparian species trees is proposed to the western boundary of Yawthorpe Beck to the east of the Cottam 2 Site. Although this may not be visible from this viewpoint, being within the valley, the increased tree cover will enhance the character of the area locally and provide a strong buffer and ecological benefit to the beck along this stretch.

#### Shelterbelt

A 5m shelterbelt is proposed to the western boundary of the Cottam 2 Site, infilling where existing vegetation is missing. This will provide a strong boundary and defined field patter, mitigate views and integrate existing disparate vegetation, creating height where the landscape is somewhat exposed in places.

A shelterbelt to the east of The Cottage and Corringham Grange Farm is proposed to mitigate views east from these properties into the panelled areas

## Existing hedgerows

Existing hedgerows to the entrance to The Cottage are to be enhanced, being allowed to grow out, with hedgerow trees added.

Further hedgerow enhancement is proposed to the northern, eastern and western boundaries of field H8, strengthening the field pattern and providing some added height and structure to these boundaries and further breaking up the blocks of panels.

# Operation (Year 15)

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

By Year 15, the close-mid range views will be enhanced by the addition of trees and hedges with existing hedgerows allowed to grow out and be managed at 5m. Planting will have established and will soften the views locally creating a less exposed feel to this area. In the distance, the ridge beyond the valley will sit above proposed and existing planting creating a strong layered effect across the landscape with a predominantly wooded horizon where views exist.

This is a relatively close-range view of Cottam 2's western boundary.

**Overall:** The potential for river landscape and its tributaries to change is a key consideration for mitigation for the Cottam 2 Site, but there is potential to introduce positive landscape interventions such as biodiversity and nature conservation initiatives. The impact on long distance views from surrounding towns and villages is also a key consideration.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.

Shrubs: 0.9m at Year 1 and 5m at Year 15.

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain longterm improvements in biodiversity in the local area, all of which will benefit visual receptors.

With Mitigation, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



	Viewpoint is within 0.5km study area and will			
	experience effects at construction stage.	Existing hedgerows are to be enhanced to the south of field H6 allowing		
		this to grow out and be managed to a height of 5m. Additional		
	Substation	hedgerow trees are to be provided to create a strong field boundary adjoining an area of proposed planting around an existing pond.		
	This viewpoint is within the 2km study area.	adjoining an area of proposed planting around an existing pond.		
	Cottam 1 substation is likely to be visible to	Reinforce hedgerow with tree planting at the western and northern		
	the north of this viewpoint above existing	boundary of fields H3, H1 and H6 to mitigate views from the Beck and		
	vegetation.	from Corringham.		
		Native Shrub Planting		
		To the south of field H6, the existing pond, ditch and some lone field		
		trees are to be incorporated into a block of native shrub planting in this		
		area creating ecological enhancement whilst integrating disparate landscape features into the overall scene.		
		landscape reacures into the overall scene.		
		New hedges		
		New hedgerows with hedgerow trees are proposed around Corringham		
		Grange Farm and The Cottage, mitigating views into the panelled areas		
		and creating a strong buffer to the Scheme.		
		Constant of the		
		Grassland mixes  A flower rich pollinator mix is proposed around the two properties with		
		a meadow set out between the two and an area to the south of		
		Corringham Grange Farm creating a 50 buffer to the panelled area.		
		coming name of any creating a so some to the partened area.		
		Elsewhere, tussock mixes are to be provided to the boundaries of		
		existing and proposed vegetation with the flower rich pollinator mix		
		proposed to south and westerly facing vegetation as well as beneath		
		existing overhead power lines as appropriate.		
		Adverse effects:		
		Panels and structures across the landscape  Increased band standing areas		
		<ul><li>Increased hard standing areas</li><li>Increased traffic locally</li></ul>		
		<ul> <li>Some minor light pollution within open countryside</li> </ul>		
		Substation, Battery storage and other associated infrastructure		
		structures visible above existing vegetation		
Magnitude	Low	Low	Very Low	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Neutral & Long Term	Neutral & Short Term
Significance				
of Effect	Minor Not Significant	Minor Not Significant	Negligible Not Significant	Negligible <b>Not Significant</b>
	1	<u>I</u>	I	1



Viewpoint: LO	oint: LCC-C-P - Corringham Beck				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]			
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary The Cumulative Effects upon viewpoint LCC-C-P of the Cumulative Developments is Minor at year 1 of operation and Minor at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.			
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.			
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.			
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.2 [C6.4.8.15.2.2]</b> which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.			
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:			
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]			
		Overall Landscape Character of the Unwooded Vales  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area.			
Magnitude	No Change	Construction: Low Operation (Year 1): Low Operation (Year 1) with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low			
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term			
Significance of Effect	No Change	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1) with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant			



# **Viewpoint VP1 - Tillbridge Lane**

## **Viewpoint Baseline:**

The view is located on Tillbridge Lane at the junction with the B1398 at the Tillbridge Lane Viewpoint and picnic area. The view is looking northwest towards the eastern extent of the Cottam 1 South Site in the foreground with the Cottam 1 North Site beyond.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying almost flat landscape within the wider context of a broad vale, which is very conspicuous in this view. The view is looking from the Limestone Scarps and Dipslopes Character Area 6a, which then extends as far west as the Wooded Vales Character Area 4b and the Floodplain Valleys Character Area 3a. The land use is mainly productive arable farmland with many of the large fields under single crop. There is deciduous woodland including North Carlton Covert and Scampton Gorse visible in the foreground with other riparian woodland along the course of the River Till as a strong feature on the valley floor. The low-cut hedgerow field boundary to the northwest boundary of the vantage point allows direct views across the open landscape, and the tall trees to each side helps to frame the view. The pattern of open arable fields and strong woodland blocks is a key feature of the view, and the River Till and associated tributaries are also notable due to the riparian vegetation. The river forms a meandering course along the eastern edge of the Site/Sites heading towards Sturton by Stow, and this feature makes a key contribution to the landscape pattern by adding informality to what is a generally geometric (almost formal) arrangement of field patterns and roads. In terms of man-made elements, masts, potly shrouded in the fore ground and the distance. There is also a contrasting range of settlements (small villages, hamlets, and larger market towns) scattered individual farmsteads and residential dwellings which are mostly shrouded in tree cover, all which add to the pattern of the landscape. Regular geometric blocks of woodland also dominate the views (at Brattleby in particular) and add to the formal qualities of the landscape pattern. Deciduous woodland is clearly visible in the distance and the middle ground has several tree clumps in the central part of the Vale. Elsewhere, the settlement of Willingham by Stow, Stow

<u>Subjective:</u> The viewpoint depicts an exposed large-scale landscape, that is extensive due to the nature of the location as a vantage point or vista, which allows panoramic views across the area. In terms of variety, the landscape is uniform and mostly consistent, and the pattern of settlements and woodland cover also adds interest and balance. In terms of texture and colour, the fields are under single crop, and this gives a monochrome appearance to the view, but the woodlands and settlements add colour. The Trent power industry on the far horizon also adds interest to the view. There is an overriding impression of this being a landscape of a vast scale, with far-reaching views that are very pleasant and invigorating. The view has a calm and invigorating quality.

<u>Overall:</u> The view is influenced by the presence of the combination of features in the wider context of the Broad vale. The tributary of the River Till is one of the key features due to the presence of localized concentrations of riparian tree cover. The woodland blocks add to this riparian vegetation, giving an overall combination of a heavily wooded landscape. The overall experience is invigorating and very pleasant.

#### Receptors

This viewpoint is a dedicated location to appreciate panoramic views at a local well-used location that are available across four East Midlands Regional Landscape Character Areas (3a, 4a, 4b and 6a). The viewpoint provides views for specific observers coming to enjoy the vista, walkers, horse riders and motorists and is known as the 'Tillbridge Lane Viewpoint'.

## **Description of View:**

The foreground of the view comprises a mixed species hedgerows framing an arable field that slopes towards the west. There is a wide grass verge to the front of the hedgerow that borders the parking area. The presence of the hedgerow breaks up the middle ground of view leaving the distant horizon as the main feature. The foreground is also framed by deciduous trees to each side and the parking spaces are also placed within intermittent tree cover such that views towards the rear of the viewpoint are more filtered than those to the front (west part). In the far distance the landscape forms a flat, low-lying presence where deciduous woodlands such as North Carlton Covert and Scampton Gorse stand out in contrast to the open arable fields. The view mainly highlights the productive arable landscape with large fields and contrasting woodlands visible amongst hedgerows and hedgerow trees. The hedgerows add to the overall wooded context of the landscape due to the elevation of the view. To the right-hand side of the view, the tall hedgerow bordering the parking area close down views in that direction and likewise to the left of the view. The remainder of the horizon is made up of large skies with few vertical features other than the power industry of the River Trent floodplain in the far distance.





# Receptor susceptibility to change

In terms of forces for change for VP1, the flood plains are distinctive features in the context of the River Trent towards the west on the horizon, however, the rivers themselves, such as the River Till are not visually prominent in the wider landscape and are often hidden from view by levees or lack of riparian vegetation. There are also issues with water quality on much of the River Till, caused by run-off from agricultural land, physical modification of the river channel, and discharges from sewage treatment works.

**Overall**, the susceptibility for VP4 is conditioned by by the watercourses where they flow largely unnoticed through the landscape marked only by a fringe of scattered trees and riparian vegetation. However, there is an opportunity to reconnect the rivers with their flood plains and restore and create a mosaic of wetland and flood plain habitats including grazing marsh, pastures, fens, reedbeds, wet woodland and eutrophic standing waters. The relevant characteristics of the landscape therefore have a high susceptibility to change without undue adverse effects given there is scope to manage the link and extend existing habitats and make more space for the natural development of the watercourses and their associated topographical features.

High

# Value of view

High

<u>Scenic:</u> This location offers views over the Unwooded Vales Character Area 4a that comprises a very gently rolling landscape with the foot of the scarp slope in the foreground. This viewpoint provides a rare opportunity to capture views across an expansive landscape from the higher landform fringing the Vales within the Scarps and Dipslope Character Area 6a.

<u>Cultural:</u> The landscape shows evidence of historic settlement with farms and nucleated villages and small hamlets. There is a variety of settlement scales and the contrast between the larger market towns such as Gainsborough and the smaller settlements such as Thorpe le Fallows.

<u>Natural:</u> The extensive expanses of semi-natural habitat, rivers, and streams are an important landscape feature such as the River Till where the course can be observed within the Unwooded Vales Character Area 4a, by tracing sinuous belts of riparian habit and riverside trees, which cut across the strong geometric landscape.

<u>Recreation and Enjoyment:</u> Whilst the landform of the Unwooded Vales Character Area 4a is typically low and subdued, the contrast with the rising landform at the junction with the A1500 (Tillbridge Lane) and (B1398) provides an ideal location where panoramic views are afforded as far as the Floodplain Valleys Character Area 3a.

<u>Local Distinctiveness and Sense of Place:</u> This public vantage has a 'strong sense of place' since it is the key destination along the ridgeline, which attracts locals and visitors from wider destinations to appreciate the landscape.

<u>Health and Wellbeing:</u> The Unwooded Vales Character Area 4a provides a very limited network of PRoW but there is a concentration of footpaths that lead towards the Tillbridge Lane Viewpoint. These footpaths are mainly located around the settlements of Scampton, North Carlton and Aisthorpe provide connectivity with the landscape of the Till Vale. The linkages include footpath Scmp/35/1 which passes between the A1500 and the settlement of Scampton to the north.

<u>Important Spatial Function:</u> The Till bridge Lane Viewpoint is a popular destination to appreciate the extensive west facing views as far as the Floodplain Valleys Character Area 3a where the Trent power industry is distinctive feature of the view in the context of the wider floodplain.

**Overall,** the value of Viewpoint VP01 is shaped by this location as being a key destination for recreation and enjoyment and to appreciate the far reaching and invigorating views over the Till Vale. This is a recognized local point of interest and the opportunity to capture invigorating views across the vast landscape from the higher landform fringing the Vales.

# Sensitivity

Range of Features: The location comprises a small car park at the junction of Middle Street and Tillbridge Lane. Although a busy crossing point of two roads, this is a refuge for passing motorists and cyclists to stop and take rest from their travels. The area is set within a small woodland with grassland and picnic benches.

Importance of View: This is a well-recognised vantage point where parking and picnic facilities are specifically made available for passers by to stop and enjoy the view.

Number of Receptors: This location captures a wide range of receptors due to its location at a busy road junction. The view offers expansive views and is a draw for both locals and visitors to the area.

High

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Not Applicable





# **Viewpoint VP1 - Tillbridge Lane**

# Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering the viewpoint and the distance would also conceal the presence of the panels. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the riparian vegetation bordering the River Till would provide some screening such that these activities would be confined to a narrower section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would not the view or become a dominant feature. There would not be a considerable change to the arable land use, and the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings from this viewpoint.

## **Construction Access**

Viewpoint will not be affected by construction traffic due to the distance between the viewpoint and the proposed construction access.

## **Cable Route Corridor**

Viewpoint is within 0.5km study area and will experience effects at construction stage.

# **Operation (Year 1)**

The foreground of the view would not alter since the presence of the hedgerow leaves the distant horizon as the main feature. The foreground deciduous trees to each side of the view also closes down visibility and intermittent tree cover within the car park filters the views from this location. In the far distance the flat, low-lying landscape would remain as a feature of the view where deciduous woodlands such as North Carlton Covert and Scampton Gorse stand out in contrast to the open arable fields. The view would continue to highlight the productive arable landscape. The remainder of the horizon is made up of large skies with few vertical elements other than the power industry of the River Trent floodplain in the far distance and this would not change with the introduction of the panel areas.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

## Scattered tree belt

A proposed scattered tree belt is proposed to the western boundary of D22 either side of the existing hedgerow screening views of the more western extents of the Site whilst mitigating views to the east from 'The Lodge'.

## Shelterbelt

Longer distance views are to be mitigated by the proposed 5m shelterbelt planting adjacent to Thorpe Lane and existing roadside hedgerow.

## Existing hedges

The existing riparian vegetation to the eastern boundary is to be retained, mitigating views from further east of the Site.

Existing hedgerows surrounding fields D21 and D22 and to the north of field D1 9are to be enhanced with the addition of irregularly spaced hedgerow trees and infilled as necessary to create a layered well-treed landscape and further strengthening the existing field pattern in this area and creating some additional height across the local views.

# New hedges

The relatively small-scale field pattern in this area, broken up by existing ditches does not require additional hedge planting.

## Grassland mixes

# Operation (Year 15)

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

Views to the north and west of the Site will be screened in the close-range through the shelterbelt planting and the enhancement of existing hedges which will be managed to a height of 5m in the middle distance. These augmented hedgerows will provide a series of good quality hedgerows both formally strengthening the existing and historical field pattern and creating a multilayered landscape. Views of the longer distance, where hedgerows to not block these, will be of a layered, well treed landscape with a backdrop of some wooded vegetation in places on the horizon. Both new and existing vegetation will have established and begun to mature, creating a much stronger structure to the landscape, and retaining its overall character of the area.

**Overall**, in terms of mitigation for the Cottam 1 Site/Sites, due to the limited network of public rights of way (PRoW) across the area the aim is to enhance the river corridors and their flood plains for their recreational importance and the Trent is the main river providing a valuable link. The Trent Valley Way in particular, provides a long-distance route. The other notable river is the upper parts of the Witham of which the River Till is a tributary. The aims are to extend the non-road network, especially where it can link people to woodlands and river corridors. Trees and hedgerows make an important contribution and improvements on approaches to villages could improve the identity of the local landscape for the benefit of recreation.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

## Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long-term landscape and visual effects of this mitigation.



	Substation This viewpoint is outside the 2km study area and there would be no view of the Substation at Cottam 1.	Adjacent to existing hedgerows and proposed blocks of scattered trees, a tussock grass mix is proposed with a wildflower grass mix under the proposed panels. Areas of flower rich pollinator mix are proposed around other field boundaries as well as a 10m buffer around existing overhead power lines within field D18 and beyond.  Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Growth of existing and proposed vegetation is assumed to be:  Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	
Magnitude	Very Low	Very Low	Low	Very Low
Level of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint VP1 - Tillbridge Lane				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary The Cumulative Effects upon viewpoint 1 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.		
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.2.4: Viewpoint Analysis & Evaluation – Views Not Significant [Reference: EN010133/APP/C6.3.8.3.2.4.8] January 2023



# Viewpoint VP8 - Stur/80/1

#### **Viewpoint Baseline:**

The view is located on PRoW footpath (Stur/80/) looking northeast with the southwestern extent of the Cottam 1 South Site in the foreground and with the Cottam 2 North Site beyond.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying almost flat landscape within the wider context of a broad vale, which is conspicuous in this view. The land use is mainly productive arable farmland with many of the large fields under single crop. There is deciduous woodland including Thorpe Wood that is only just visible on the distant horizon. The lack of a hedgerow field boundary to each side of the PRoW allows direct views across the open fields towards the north. The pattern of drainage is a key feature at this location where the River Till is notable to the east (right of the view) as it forms a meandering course passing along the boundary and across the Site/Sites. This watercourse crosses beneath the Thorpe Lane just to the east at a local bridge and then takes a meandering course towards the south to pass under Tillbridge Road. The watercourse winds though the landscape and is only just discernable by its tracing of alder and willow trees that soften the skyline. In terms of man-made elements, masts and poles are evident in the distance following the route of Thorpe Lane to the east (right of view) in the foreground residential properties at Fleets Cottage to the east (right of view) add interest in the landscape with scattered farmsteads at Lower Furze Hill and Furze Hill in the distance. The church tower at Brattleby also features to the east (right of view) on the distant horizon. The landscape also feature occasional poplar shelterbelts and occasional ash trees are a feature of the hedgerows. There are also far-reaching views towards the limestone capped ridgeline towards Brattleby and Ingham.

<u>Subjective:</u> The viewpoint depicts an exposed large-scale landscape, that is extensive due to the low-cut hedgerows. In terms of variety, although the landscape is uniform and mostly consistent, it has interest and balance due to the woodland blocks and ash trees within the hedgerows that are strong vertical features. In terms of texture and colour, the fields are mostly under single crop, and this gives a monochrome appearance to the view, however there is an overriding impression of this being an interesting landscape.

<u>Overall:</u> The view is influenced by the presence of the River Till that passes beneath the Thorpe Lane at a local bridge. The watercourse is distinguished by the presence of rusty pastures and localized concentrations of riparian tree cover that soften the skyline in what is an otherwise open and featureless landscape. There are intensive levels of management within this arable landscape that add some decline to the natural qualities of the view, but interesting features remain adding to the overall character. The overall impression are views over a simple calm landscape at a local vantage point on the public footpath network just off Thorpe Lane.

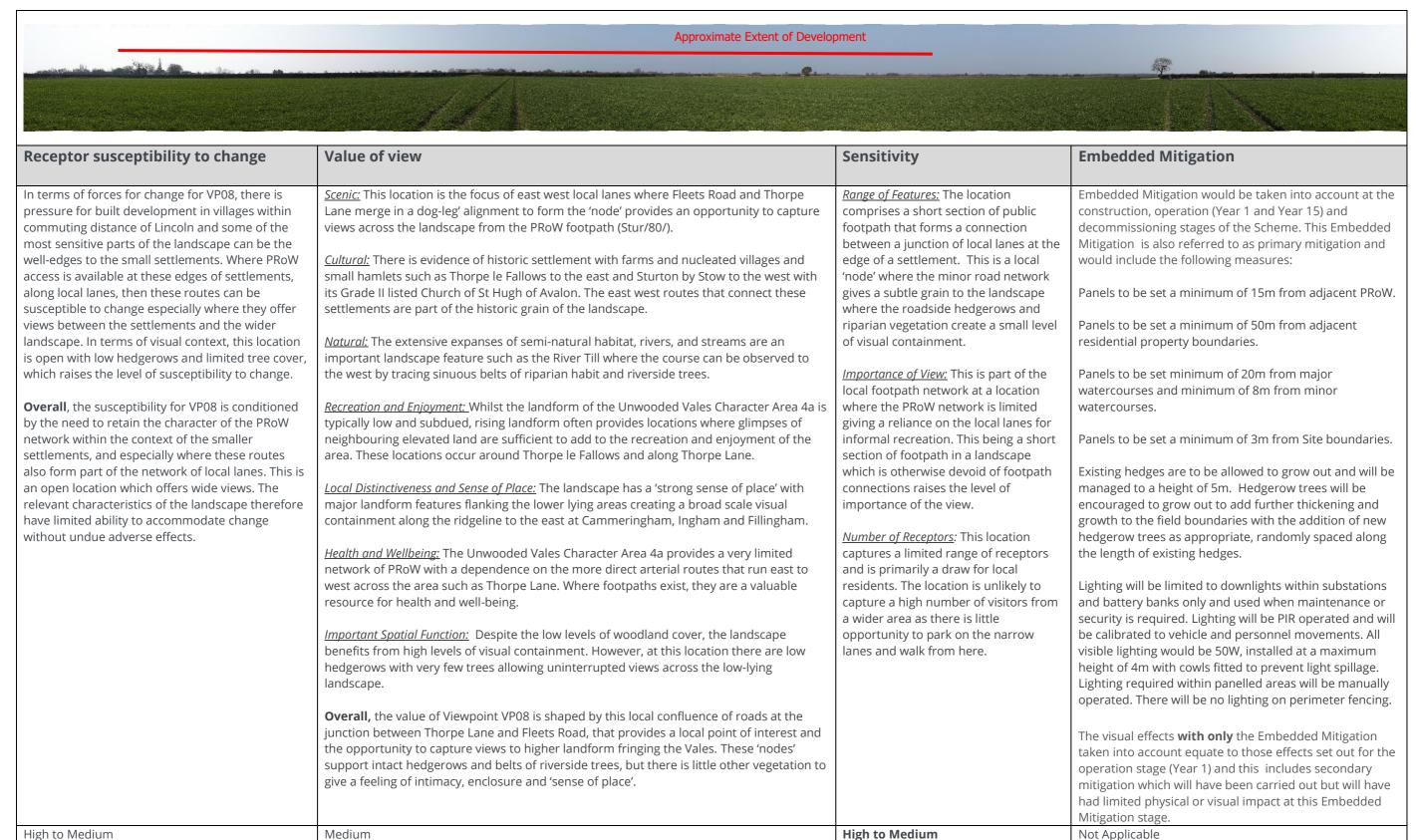
#### Receptors:

This viewpoint is representative of views for walkers travelling between Fleets Road and Thorpe Bridge.

#### Description of View

The foreground of the view is set at the junction of Fleets Lane and Fleets Road where there is a gap in the existing hedgerow that borders the junction and frames views. There is a wide grass verge to the front of the hedgerow. The hedgerow is low-cut, and its presence therefore does not influence the views across the open arable field. In the middle ground, further agricultural fields are visible where dividing hedgerows and small woodland blocks are evident in contrast to the open arable fields. The distant horizon is vast and open with higher landform at Brattleby and Cammeringham that frames the horizon. To the distance tall hedgerows and strong mature trees and woodlands such as Thorpe Wood is also evident in the view. To the right of the view, Fleets Road and its grass verges is a prominent feature and the lack of tree cover within the hedgerows allow extended views along the lane. To the left of the view, Fleets Lane meets with Fleets Road and also have extended views along their length due to lack of hedgerow trees.







# Viewpoint VP8 - Stur/80/1

Construction

# Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be screened due to the presence of intervening hedgerows and woodland cover. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerows, but the distance and the riparian vegetation bordering the River Till would provide some screening such that these activities would be confined to

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

a narrower section of the view.

These short-lived construction activities would obstruct a narrow proportion of the view and would not be a dominant feature due to the layering provided by the existing trees and woodland cover. There would be no noticeable change to the arable land use, since the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to north, west and east of this location.

## **Construction Access**

All throughout the construction stage the viewpoint will be affected due to Thorpe Lane having a point of access into the Cottam 1 South Site through field D10.

## **Cable Route Corridor**

# Operation (Year 1)

The foreground of the view where there is a gap in the existing hedgerow would not change. The wide grass verge to the front of the hedgerow would also remain a feature of the view. The views across the open arable field would also not change. In the middle ground, further agricultural fields are visible, but the dividing hedgerows and small woodland blocks would conceal the presence of the panel areas in the open arable fields due to the layering effect of the vegetation. The distant horizon would remain as a feature with higher landform at Brattleby and Cammeringham continuing to frame the horizon. To the distance tall hedgerows and strong mature trees and woodlands such as Thorpe Wood would also remain as a feature of the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A strong belt of scattered trees is proposed to the eastern boundary of the River Till, set adjacent to but a minimum of 20m from the watercourse. This belt will significantly enhance this open and exposed area whilst creating a strong ecological corridor and mitigating views into the Site from Thorpe Road and views from the west. This belt is to run north from Thorpe Road to the north of field D10 where it joins existing vegetation at this point.

The tree belt will break to cross the river and will then follow along its western edge in field D9 creating an overall belt of trees of some 1000m running north/south.

A block of scattered trees is proposed to the eastern extent of Fleets Cottages which lies in field D8 mitigating views to the east.

## <u>Shelterbelt</u>

A shelterbelt is proposed to the south of field D9 which will mitigate views into this part of the Site from the PRoW and other roads to the south.

This shelterbelt will join the scattered tree line adjacent to the River Till and create a much more defined landscape where this is currently very open.

#### Existing hedges

An existing hedgeline to the east of Fleets Cottages is to be enhanced with irregularly spaced hedgeline trees and infilled as necessary to mitigate views from this property and views from the south and southwest. The existing hedgerow to the north of this field will further break up the bulk of the panels as well as reinforce the historical field patterns.

Existing hedges to the north, west and south of field D7 are also to be enhanced breaking up views to the north and strengthening the historic field pattern. Further north field boundaries to fields D2 and D3 are also enhanced.

#### New Hedges

New hedgerows are proposed around field D3 where none exist to the north and to the east adjacent to the existing ditch.

## Grassland mixes

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

Views to the north and east will be significantly more enclosed creating a more varied and interesting route along this section of the PRoW. The close-range views to the north will be mitigated by a strong shelterbelt screening the proposed Scheme whilst scattered trees planting in a belt along the River Till will add considerable structure to the area. By year 15, this vegetation will be well established with hedgerows maintained to 5m and intermittent tree cover creating a more diverse landscape across the longer distance views with a partially wooded horizon over the valley.

**Overall**, in terms of mitigation for the Cottam 1 Site/Sites, due to the limited network of public rights of way (PRoW) across the area the aim is to enhance the river corridors and their flood plains for their recreational importance and the Trent is the main river providing a valuable link. The Trent Valley Way in particular, provides a longdistance route. The other notable river is the upper parts of the Witham of which the River Till is a tributary. The aims are to extend the non-road network, especially where it can link people to woodlands and river corridors. Trees and hedgerows make an important contribution and improvements on approaches to villages could improve the identity of the local landscape for the benefit of recreation.

There is an opportunity for new tree/scrub planting (goat willow,

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long-term landscape and visual effects of this mitigation.



Section   Company   Comp		Viewpoint is outside of the 0.5km study area.	A minimum 10m buffer either side of the existing waterways is to be seeded	hawthorn, alder, and alder	
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Viewpoint VP8 – Stur/80/1				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint 8 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.		
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features.  Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



# Viewpoint VP14 - Ingham Road

#### **Viewpoint Baseline:**

The view is located just off Ingham Road on a local green lane, looking south towards the northern extent of the Cottam 1 South Site and north towards the western extent of the Cottam 1 North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying, flat landscape where the wider context of a broad vale is hardly evident due to the tall hedgerows in the foreground. These tall hedgerows also help to reduce the sense of scale and add intimacy at this location. The land use is mainly productive arable farmland but with a local collection of smaller scale fields associated with the settlement of Stow to the east and Stow Pasture to the west. This local green lane forms part of this framework of the smaller scale field system that is generally concentrated in a 'ladder like' arrangement to the north of Ingham Road. These smaller scale fields are only distinguished in views from Ingham Road by the tree cover in the field boundary hedgerows. In terms of man-made elements, the main influences are the residential properties fronting the north side of Ingham Road including the flat-topped houses that are a typical feature of this landscape. Other flat-topped houses are located nearby just to the northwest of this green lane off Normanby Road to the south of East Farm at Normanby by Stow. Some of the residential properties along Ingham Road have large-scale agricultural buildings which adds to the built form, but these properties are mainly located to the south of the view behind the tall hedgerows. Ingham Road crosses the area in an east west direction with a clear straight alignment and meets with Fleets Lane at right angles. Fleets Lane is also prominent in the landscape but is not evident in the view. Mast poles are also visible from this location through gaps in the hedgerow standing out on the immediate horizon (right of view).

<u>Subjective:</u> The viewpoint depicts a medium to large-scale, enclosed landscape divided by arable fields and some pasture. In terms of variety, the combination of features is limited to tall hedgerows with few trees. There are some distinctive tree clumps to the northwestern of this location associated with the tributaries and land drains of the River Till but their presence is hardly evident due to the foreground hedgerows. In terms of variety, the landscape is simple but balanced and well-managed giving the impression of an ordinary landscape. In terms of colour and texture, some colour is evident within the bordering hedgerows which adds interest. The hedgerows are however mostly closely cut which creates a sterile context to an otherwise attractive landscape.

<u>Overall:</u> The view is pleasant and typical to the character of the green lanes in this locality, where there are tall dense hedgerows with a strong feeling of intimacy and enclosure. There are a number of extended gaps in these hedgerows that allow for direct, but framed views across the arable landscape adding some interest. The overall experience of this view is pleasant but also bland due to the straight direction framed by hedgerows to each side, creating a 'tunnel like' experience. The bordering fields however are softer and add some sense of intimacy, which helps to mitigate the lack of appreciation of the wider landscape.

#### Receptors

This viewpoint is representative of views for walkers using the local green network for passive recreation. This is not a PRoW or permissive path. This green lane extends from Ingham Road in the south to connect with a further green lane to the north at a local bridge crossing over the River Till.

## **Description of View:**

The foreground of the view is set in the context of a local green lane that is bordered to each side by tall hedgerows. There are very few gaps within the hedgerows and so the location is enclosed with very limited extended visibility other than along the green lane itself towards the north. The hedgerows are dense and their presence masks the presence of the arable fields that lie beyond. Middle ground views are only glimpsed at the end of the lane and distant views are not experienced from this location. To the right of the view, there is a local collection of grassland fields divided by tall hedgerows and mature tree cover, but they are hardly evident due to the presence of the dense hedgerow. To the left of the view, there is a series of large-scale arable fields but they are also concealed behind the hedgerow.





Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
In terms of forces for change for VP14, there is pressure on footpath networks especially those in close proximity to settlements within commuting distance of Lincoln. Access to the PRoW network is already limited in this location and the connections are scarce, and this is a green lane. In terms of visual context, this location is enclosed by tall hedgerows and ribbon development along Ingham Lane. The opportunity to capture views of the skylines, woodlands, watercourses and river corridors (which are key features of this locality) is not available, and this location is therefore not particularly vulnerable to landscape change.  Overall, the susceptibility for VP14 is conditioned by the sensitivity of the rural roads and minor tracks and green lanes which connect between them. This is an enclosed location which offers limited views. The relevant characteristics of the landscape therefore have some ability to accommodate change without undue adverse effects.	Scenic: Agriculture is the dominant land use, with most of the land being used for growing cereals, oilseeds and other arable crops. The landscape reveals views of an open nature beneath vast skies that are often extensive and uninterrupted, but some views are enclosed and accessed via a green lane network.  Cultural: A predominantly rural and sparsely settled area with small villages and dispersed farms and residential dwellings linked by long straight roads (such as Ingham Road) and a network of minor tracks (such as the green lane) which connect with the River Till and its tributaries.  Natural: Very little semi-natural habitat remains across the area, apart from habitat associated with the River Till and its tributaries, and green lanes which link to this asset are an important feature of the landscape.  Recreation and Enjoyment: The public right of way (PRoW) network is limited apart from a few north south routes that connect between the long straight roads running east to west across the area. Where local green lanes can supplement this network, this should be recognized.  Local Distinctiveness and Sense of Place: A regular pattern of medium to large fields are enclosed by hawthorn hedges.  Where the recreational network gives access to appreciate this feature this gives a strong sense of identity to views.  Health and Wellbeing: Access to these remote areas is mainly confined to the long, straight roads since PRoW connections are limited across the area, but where green lanes exist, they are important.  Important Spatial Function: The predominance of large-scale agriculture and limited settlement and development provides an important spatial function but the green lanes and footpath and bridleway network are important to this spatial function.  Overall, the value of Viewpoint VP14 is shaped by this area being extensively farmed over a long period, where very little semi-natural habitat remains and the agricultural intensification has diminished the 'sense of place' in parts. The presence of green lanes h	Range of Features: This location comprises a green lane that forms a north-south connection between the east-west minor road network and a local farm track. This is an enclosed location bordered by high hedgerows in the context of built from with a limited range of features.  Importance of View: This is part of a local green lane network at a location where the views capture little appreciation of the surrounding countryside. This being a green lane however does raise the level of importance of the view.  Number of Receptors: This location captures a limited range of receptors and is primarily a draw for local residents. The location is unlikely to capture a high number of visitors from a wider area as there is little opportunity to park on the narrow lanes or incentive/inspiration to walk from here.	Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:  Panels to be set a minimum of 15m from adjacent PRoW.  Panels to be set a minimum of 50m from adjacent residential property boundaries.  Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.  Panels to be set a minimum of 3m from Site boundaries.  Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.  Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spilage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.  The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.
Medium	Medium to High	Medium to High	Not Applicable





# **Viewpoint VP14 - Ingham Road**

Construction

# Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be screened due to the presence of the intervening hedgerows. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerows, but the riparian vegetation bordering the River Till would

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

provide some screening such that these

activities would be confined to a narrow

section of the view.

These short-lived construction activities would obstruct a small portion of the view and would not result in a change to the views's composition. There would be a small change to the arable land use, but the field boundaries and the associated tree cover would remain intact such that alterations to the baseline would not be readily noticeable from this location. There would not be a fundamental change to the surroundings to the west of Ingham Road.

# Construction Access

All throughout the construction stage the viewpoint will be affected due to the local road just off of Ingham Road providing access for construction vehicles into fields E3 and E4.

## Operation (Year 1)

The foreground of the view would not change and continue to be set in the context of a local green lane that is bordered to each side by tall hedgerows. There are very few gaps within the hedgerows and so the presence of any panels would not be evident from this location. The hedgerows are dense and their presence masks the presence of the arable fields that lie beyond. Middle ground views would remain as being glimpsed at the end of the lane and distant views are not experienced from this location so they would not alter. To the right of the view, the local collection of grassland fields divided by tall hedgerows and mature tree cover would remain as being hardly evident due to the presence of the dense hedgerow. To the left of the view, the series of large-scale arable fields would remain as being concealed behind the hedgerow.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

## Scattered tree belt

Looking northeast from this viewpoint towards the Cottam 1 West Site, a number of scattered tree belts are proposed around the River Till setting the proposed Scheme back 50m from the watercourse.

Belts are proposed within fields E1, E2 and to the eastern extents of D4. These tree belts will provide height and interest across the landscape whilst helping to define the route of the river with the addition of some riparian vegetation. These belts will act as a buffer to, and screen views of the panels from the watercourse.

## Shelterbelt

A shelterbelt is proposed to the western boundary of field E1 to augment the existing vegetation on this boundary to mitigate views of the Scheme from the west and from Ingham Road.

#### Existing hedges

Existing vegetation around fields F2 and F7 is to be retained, helping to screen Site/Sites beyond the river Till.

Elsewhere existing hedgerows that require enhancement will be grown out and managed to a height of 5m with the introduction of irregularly spaced hedgerow trees along their length to increase tree cover locally, help to mitigate views into the Site/Sites and strengthen both the character area and the historic field patterns.

Enhanced hedges are to be introduced to the western and southern boundaries of field E5 and E6 as well as the northern boundary of field E2.

To the south of the Ingham Road, enhanced hedgerows will be provided to the northern and southern boundaries of Field D3 and the southern boundary of D2.

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

Views of Thorpe Wood may be evident where visibility permit in the distance looking southeast with other local woodland sitting over the horizon. To the northeast, the general cover will be increased with mid-range views of the Site's southern vegetation and some distant woodlands beyond making up the horizon. The mitigation would allow hedgerow trees to grow out to give the environment a natural feel and have a softer edge facing the green lane.

Overall, in terms of mitigation for the Cottam 1 Site/Sites, due to the limited network of public rights of way (PRoW) across the area the aim is to enhance the river corridors and their flood plains for their recreational importance and the Trent is the main river providing a valuable link. The main aim is also to enhance the woodland and hedgerow network through the planting of small woodlands, tree belts, hedgerow trees and new hedgerows to benefit landscape character. Creating grass margins in arable fields is also a key priority, including increasing the amount of flower rich areas, hedgerows and species rich grasslands. Planting new hedgerows to restore historic field patterns and creating habitat linkages is also appropriate to counteract the threat to the landscape character and biodiversity.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including, site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.





Viewpoint VP14 - Ingham Road				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to	In Summary The Cumulative Effects upon viewpoint 14 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.		
	anticipated.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



# Viewpoint VP16 - Bridleway Camm/31/1 and Ingham Road, Furze Hill

#### **Viewpoint Baseline**

The view is located at the junction with PRoW, bridleway Camm/31/1 and Ingham Road Furze Hill, looking south towards the Cottam South 1 Site and north towards the Cottam I North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying almost flat landscape within the wider context of a broad vale, which is very conspicuous in this view. The land use is mainly productive arable farmland with many of the large fields under single crop. There is some deciduous woodland including a large, irregular woodland block to the west of Cammeringham known as Cammeringham Low Covert, Brattleby Gorse and Thorpe Wood that are just visible to the southeast (left of view), woodland around the settlement of Thorpe le Fallows and poplar shelterbelts also punctuate the landscape. The pattern of drainage is a feature at this location and the tributaries of the River Till takes a meandering course along the eastern edge and across the Site/Sites. The watercourse winds though the landscape and is hardly discernable except for a minor tracing of alder and willow trees. In terms of man-made elements, Squire's Bridge with its associated concrete parapet, box piers and scaffold railings create an industrial appearance. These bridge crossings are typical of this landscape and the lack of tree cover immediately around them (and along the banks of the River Till) to mitigate flood attenuation is also a typical feature, but this assists in providing open views across the arable fields in all directions. The agricultural and farmstead buildings at Furze Hill and Lower Furze Hill are just evident in the foreground and there are distant views towards the settlement of Stow and Sturton by Stow across the flat landscape.

<u>Subjective:</u> The viewpoint depicts an exposed, large-scale landscape, that is open in nature due to the absence of hedgerow trees and woodland cover in the foreground. In terms of variety, the landscape is uniform and mostly consistent, it also lacks interest other than the bridge crossings that lends a distinctive 'sense of place' along the otherwise straight and often repetitive road network. These views also extend as far as the Limestone Scarps and Dipslopes Character Area 6a where the woodlands at Cammeringham and Brattleby form a distinctive feature on the horizon. In terms of texture and colour, the fields are under single crop, and this gives a monochrome appearance.

Overall: The viewpoint is influenced by the presence of the long straight alignment of Ingham Road. The River Till is just to the west of this viewpoint, where it passes beneath Squire's Bridge as a local bridge crossing and notable feature that breaks the monotony of Ingham Road. The watercourse is distinguished by the presence of its tree cover in what is an otherwise open landscape with a strong presence of woodland in the distance. The riparian woodland that follows the meandering course of the River Till is the distinctive feature as well as the wide grass verges on Ingham Road. The intensive levels of management within this arable farmland add decline to the natural qualities of the view, but the overall impression is that of a simple, calm and muted landscape with some interesting features.

#### Receptors

This viewpoint is representative of views available to walkers, motorists and residents travelling from Stow, Ingham, and Cammeringham along Ingham Road. The viewpoint is also representative of users of the bridleway (Camm/31/1) that heads south from Ingham Road in a 'dog-leg' alignment to meet with Thorpe Lane in the south.

#### **Description of View:**

The foreground of the view is set in the context of Ingham Road that is bordered to each side by agricultural land. There is also Furze Hill, which is a residential property and farmstead set to the south side of Ingham Road. Ingham Road passes in an east-west direction between Stow and Ingham. There are some gaps in the hedgerows, and they are low cut allowing extended visibility towards the north, but visibility towards the south is curtailed by the presence of the farmstead and associated agricultural buildings. Middle ground views follow the alignment of Ingham Road and lead the eye towards the small settlement of Stow Pasture and its associated vegetation. To the right of the view, the shelterbelt and woodlands associated with Coates are strong features and close down visibility in this direction. To the left of the view, the landscape is punctuated by the tree planting along the course of the River Till, otherwise the landscape is lacking in woodland other than the hedgerows that support some individual tree cover.

Not Applicable



Medium

Medium



#### **Receptor susceptibility to change** Value of view **Embedded Mitigation** Sensitivity In terms of forces for change for VP16, there Scenic: Views towards the Limestone Scarps and Dipslopes Character Area 6a Range of Features: This location comprises the Embedded Mitigation would be taken into account at the is pressure on bridleway networks especially are part of key views across the area. Views from Ingham Road capture the junction of a bridleway with the local road construction, operation (Year 1 and Year 15) and those in quiet locations that offer optimum woodland along the scarp slope defining the ridgeline at Ingham Cliff and network. This is a part open location within the decommissioning stages of the Scheme. This Embedded conditions for riding. Access to the bridleway Cammeringham. context of built form, but with an interesting Mitigation is also referred to as primary mitigation and would network is already limited in this location and include the following measures: collection of features such as woodland at Coates the connections are scarce. In terms of visual Cultural: The landscape shows evidence of Roman roads and network of minor and hedgerows (that create an intricate and context there is built development, and this is enclosure roads and lanes that cross the Unwooded Vales Character Area 4a. textured landscape). Panels to be set a minimum of 15m from adjacent PRoW. a junction with the local road network that The course of Ingham Road is a part of this network. *Importance of View:* This is part of a local runs east west connecting two settlements Panels to be set a minimum of 50m from adjacent residential Natural: There is a diverse character with arable, woodland, shelterbelts, tree with regular passing traffic. This location is bridleway network at a location where the views property boundaries. clumps and hedgerows that create an intricate and textured landscape. From therefore not particularly vulnerable to capture some appreciation of the surrounding bridleway Camm/31/1 there are 'all round' views capturing this combination of countryside, but in the context of man-made Panels to be set minimum of 20m from major watercourses and change. features. The woodland at Coates Hall and Hall Farm is a distinctive feature of interventions. This being a bridleway where minimum of 8m from minor watercourses. **Overall,** the susceptibility for VP16 is the view. connections are scarce (and at a location where conditioned by access to a bridleway network the rider is likely to be walking and not trotting Panels to be set a minimum of 3m from Site boundaries. Recreation and Enjoyment: The Scarps and Dipslopes are valued for recreation within an area that already has poor the horse) does however raise the level of connections. This is a part open location which often focuses on the locations where the crests of ridges allow views importance of the view. The course of Ingham Existing hedges are to be allowed to grow out and will be which offers open views towards the west and across the area. Views within the Unwooded Vales Character Area 4a however Road is also a part of the network of local lanes, managed to a height of 5m. Hedgerow trees will be encouraged southwest, but in the context of built often focus the confluences of PRoW and the local lanes or 'nodes' that cross along with Thorpe Lane, Fillingham Lane and to grow out to add further thickening and growth to the field interventions and passing traffic. The relevant the landscape, which are also important locally. Willingham Road that cross the landscape east to boundaries with the addition of new hedgerow trees as characteristics of the landscape therefore appropriate, randomly spaced along the length of existing some ability to accommodate change without Local Distinctiveness and Sense of Place: The landscape has a 'strong sense of hedges. undue adverse effects. place' with a subtle regimented character that is reinforced by the geometric **Number of Receptors**: This location captures a patterns of fields. At locations where the regimented landscape character is limited range of receptors and is primarily a draw Lighting will be limited to downlights within substations and softened by the meandering watercourses, they are important in views across for local riders and occasional walkers. The battery banks only and used when maintenance or security is the area. location is unlikely to capture a high number of required. Lighting will be PIR operated and will be calibrated to visitors from a wider area as there is limited vehicle and personnel movements. All visible lighting would be Health and Wellbeing: The Scarps and Dipslopes provide a rural landscape that incentive/inspiration/facilitation to walk or ride 50W, installed at a maximum height of 4m with cowls fitted to has remained largely intact but the landscape within the Vales is also intact from here. prevent light spillage. Lighting required within panelled areas and can be experienced from the PRoW network and local lanes that come will be manually operated. There will be no lighting on together. perimeter fencing. Important Spatial Function: The landscape benefits from its low elevation, and The visual effects with only the Embedded Mitigation taken into the views from these PRoW in the lowlands towards the elevated areas are account equate to those effects set out for the operation stage important. (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual **Overall**, the value of Viewpoint VP16 is shaped by the large-scale arable land impact at this Embedded Mitigation stage. use that creates a strong sense of identity. There are other features such as the low elevation and the views towards the scarp slope. The 'all-round' views from this location captures other features such as woodland at Coates and hedgerows are also important.

Medium to High





# Viewpoint VP16 - Bridleway Camm/31/1 and Ingham Road, Furze Hill

# Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Ingham Road. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the riparian vegetation bordering the River Till would provide some screening such that these activities would be confined to a narrower section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south of Thorpe Lane.

## **Construction Access**

All throughout the construction stage the viewpoint will be affected due to Ingham Road having a point of access into the Cottam 1 North Site. The access route is through a local track near Low Farm as it connects to fields C26 and C25.

## Cable Route Corridor

Viewpoint is outside of the 0.5km study area.

# **Operation (Year 1)**

The foreground of the view would continue to be set in the context of Ingham Road that is bordered to each side by agricultural land. There are some gaps in the hedgerows, and they are low cut allowing extended visibility towards the north where the presence of the panels would be set to the northeast beyond the course of the River Till and so would occupy only a small portion of the view and would therefore not result in in a change to the views composition. The visibility towards the south is curtailed by the presence of the farmstead and associated agricultural buildings and this would not change. Middle ground views would continue to follow the alignment of Ingham Road, and this would not change since the panels are set back from Ingham Road. To the right of the view, the shelterbelt and woodlands associated with Coates would remain as strong features. To the left of the view, the landscape is punctuated by the tree planting along the course of the River Till and the hedgerows support some individual tree cover which would help the panels sit comfortably in the landscape. The panels would therefore occupy a small portion of the view and the impacts would be detectable but not readily alter the baseline.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

## Scattered tree belt

A scattered tree belt is proposed to the northwest of this viewpoint, offsetting the Scheme 20m from the existing watercourse in field E5 and increasing the tree cover locally.

Existing hedges to the north and south of field D4 and to the south of field D3 are to be enhanced with additional hedgerow trees to increase the level of tree cover locally and to reinforce the natural and historical field patterns.

To the southeast of this viewpoint northern and western hedgerows to field D26 and the western boundary of D24 are to be enhanced, being allowed to grow out to a height of 5m with additional hedgerow trees added to reinforce the character and mitigate views from the north along Ingham Road and from the west along the PRoW.

# Operation (Year 15)

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

Views to the southwest are blocked the proposed new hedgerows will have established to create a strong field structure and screen views of the Scheme. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the closerange, the hedgerows will screen Site/Sites with mid and longer distance views appearing as a layered well-treed landscape with a backdrop of strong woodland features to some views with more distant horizons of hedgerow trees and some areas of woodland. The open character of the River Till at this point will be maintained with occasional areas of enclosure.

Overall, in terms of mitigation for the Cottam 1 Site/Sites, hedgerow trees are scarce and limited to oak and ash, with willow along watercourses. The flowing tributaries of the River Till have formed small valleys which are barely evident due to the lack of riparian vegetation. The shift away from mixed farming has impacted upon areas of pasture and grassland habitats, which has had an impact upon local character and biodiversity. The watercourses are not readily distinguished in the landscape due to the lack of waterside trees and riparian habitats and so they would be a main focus for mitigation.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

# **Decommissioning**

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



	Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	To the northeast, the southern boundaries of fields E5 and E6 are to be enhanced to mitigate views from the south and southeast.  New hedges  A new hedge is proposed to the north of field D3 where none exists to break up the existing large field. And reduce views south towards the immediate Site and that further to the south.  Grassland mixes  A tussock mix is proposed to the boundaries of	New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	
		existing and proposed hedges with flower rich pollinator mixes proposed on south and west facing hedge bases. Wildflower meadow mix is to be seeded beneath panels.  To the east of field E5, a tall herb mix is proposed adjacent to the watercourse to create a strong buffer to the river at this point. Field E6 is to be seeded with		
		a bird mitigation mix.  To the southwest, fields D2 and D3 and fields D7 and D9 are to revert to floodplain meadow  Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside		
		<ul> <li>Substation, Battery storage and other associated infrastructure structures visible above existing vegetation</li> </ul>		
Magnitude	Low	Very Low	Very Low	Very Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Minor <b>Not Significant</b>	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint VI	/iewpoint VP16 – Bridleway Camm/31/1 and Ingham Road, Furze Hill		
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary The Cumulative Effects upon viewpoint 16 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.	
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
		Aesthetic Aspects of the Landscape  Refer to Figure <b>8.15.2.1</b> [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]	
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.	
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features.  Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.	
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low	
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term	
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant	



# Viewpoint VP17 - Stow/83/1

### **Viewpoint Baseline:**

The view is located on PRoW, footpath (Stow/83/1), looking south towards the Cottam 1 South Site and north towards the Cottam 1 North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying almost flat landscape within the wider context of a broad vale, which is very conspicuous in this view. The land use is mainly productive arable farmland witVh many of the large fields under single crop. There is some deciduous woodland including a large, irregular woodland block known as Normanby Gorse that is just visible to the west (left of view), woodland around the settlement of Coates and poplar shelterbelts also punctuate the landscape. The pattern of drainage is a key feature at this location and the River Till is notable to the west (left of the view) as it takes a meandering course through the landscape heading west towards the settlement of Normanby by Stow. The watercourse winds though the landscape and is hardly discernable except for a minor tracing of alder and willow trees. In terms of man-made elements, Squire's Bridge with its associated concrete parapet, box piers and scaffold railings create an industrial appearance. These bridge crossings are typical of this landscape and the lack of tree cover immediately around them (and along the banks of the River Till) to mitigate flood attenuation is also a typical feature, but this assists in providing open views across these bridge locations. Ingham road itself is not visible in this view due to the flat, low-lying nature of the landscape at this point, and the intervening field cropping. A poplar shelterbelt is also evident in the immediate context of the view closely following the alignment of the River Till drain. Furze Hill Farm (Red brick) also stands out in the landscape.

<u>Subjective:</u> The viewpoint depicts an exposed, large-scale landscape, that is open in nature due to the absence of hedgerow trees and woodland cover in the foreground. In terms of variety, although the landscape is uniform and mostly consistent, it lacks interest other than the bridge crossing that lends a distinctive 'sense of place' and 'all round' views. These views also extend as far as the Limestone Scarps and Dipslopes Character Area 6a where the woodlands at Cammeringham and Brattleby form a distinctive feature on the horizon. In terms of texture and colour, the fields are under single crop, and this gives a monochrome appearance, but there are contrasts between the dark woodland blocks and the open, arable fields.

<u>Overall:</u> The viewpoint is influenced by the presence of the River Till that passes beneath Squire's Bridge as a local bridge crossing. The watercourse is distinguished by the presence of its canalized section, and lack of tree cover in what is an otherwise open landscape with a strong presence of woodland in the distance. The riparian woodland that follows the meandering course of the River Till is also a distinctive feature as well as the wide grass verges on Ingham Road. The intensive levels of management within this arable farmland add decline to the natural qualities of the view, but the overall impression is that of a simple, calm, and muted landscape with some pleasant views.

#### Receptors:

This viewpoint is representative of views available to walkers along the PRoW, public footpath (Stow/83/1) travelling from Hall Farm at Coates towards Ingham Road.

#### Description of View:

The foreground of the view is set in the context of the public footpath that leads from the small settlement of Coates and that is bordered to each side by arable land use. Ingham Road passes in an east west direction just to the south of the view. The views are 'all-round' and open since there are no hedgerows to each side of the footpath and the hedgerows to each side of Ingham Road are also low cut allowing extended visibility towards the south across the extensive arable landscape. Foreground views follow the alignment of the footpath as far as Ingham Road where middle-distance views then extend across the open arable landscape with woodlands and shelterbelts on the far distant horizon. To the right of the view, the course of the River Till and associated shelterbelt vegetation are the key features with extended views towards the small settlement of Stow Pasture. To the left of the view, there is middle ground visibility as far as the residential property known as Furze Hill and then extended views as far as the ridgeline and woodland at Ingham Cliff.



Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
In terms of forces for change for VP17, there are aims to protect existing rural landscape features, in particular the restoration of hedgerows since the most widespread change has been agricultural intensification and the change from pastoral to arable cropping that has resulted in the loss of hedges, and consequently, increase in field size. The loss of pasture around historic settlements such as Coates is particularly evident, where grazing animals and smaller field sizes contribute to their setting and structure. In terms of visual context, this is an open location within a large arable field and few hedgerows, and within the wider context of a historic settlement. This location is therefore vulnerable to change.  Overall, the susceptibility for VP17 is conditioned by the flat, open landscape and the loss of field boundaries in the context of historic settlement. This is an open location with very little in the way of landscape structure. The relevant characteristics of the landscape therefore have a limited ability to accommodate change without undue adverse effects.	Scenic: There are extended views east towards the Limestone Scarps and Dipslopes Character Area 6a and towards the west as far as the Wooded Vales Character Area 6a. These views capture the woodland at Ingham Cliff and Cammeringham and woodland that forms part of Blyton, Laughton Common and Loughton Woods.  Cultural: The landscape shows evidence of medieval settlement at Coates (List Entry 1016979) which includes earthwork remains. The woodland cover surrounding the settlement is a key feature. Squire's Bridge with its associated concrete parapet, box piers and scaffold railings are a feature. These bridge crossings are typical of this landscape.  Natural: There is a diverse character with hedgerows, woodland, polar shelterbelts, tree clumps, isolated trees, and hedgerow trees, that create an intricate and textured landscape. From footpath (Stow/83/1), there are 'all round' views capturing this combination of features.  Recreation and Enjoyment: The Scarps and Dipslopes are valued for recreation which often focuses on the locations where the crests of ridges allow views across the area. Views within the Unwooded Vales Character Area 4a from the PROW network that pass in close proximity to the River Till are important locally.  Local Distinctiveness and Sense of Place: The landscape has a 'strong sense of place' with a subtle regimented character reinforced by the geometric patterns of fields. Where the regimented landscape character is softened by the meandering watercourses, this is important locally.  Health and Wellbeing: The landscape within the Vales is intact and can be experienced from the east west minor road network that crosses the area where views towards the scarp can be gained.  Important Spatial Function: The landscape benefits from its low elevation, and the views from the PRoW network in the lowlands towards the elevated areas are important locally.  Overall, the value of Viewpoint VP17 is shaped by the large-scale arable land use that creates a strong sense of identity at this location. There a	Range of Features: This location comprises the local footpath network within an expansive arable landscape. This is an open location where the appreciation of the wider landscape can be captured but with a limited number of features other than the adjoining shelterbelt and woodland around the settlement of Coates.  Importance of View: This is part of the local footpath network, but in the context of a large-scale arable landscape. This being a public footpath in close proximity to the network of watercourses in the area raises the level of importance of the view. The course of the River Till is gently meandering at this location with very few interesting features, but with significant scope for improvement to the structure of its riparian vegetation.  Number of Receptors: This location captures a limited range of receptors and is primarily a draw for local riders and occasional walkers. The location is however likely to capture some visitors from a wider area due to the presence of the medieval settlement of Coates.	Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:  Panels to be set a minimum of 15m from adjacent PRoW.  Panels to be set a minimum of 50m from adjacent residential property boundaries.  Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.  Panels to be set a minimum of 3m from Site boundaries.  Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.  Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50%, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.  The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.
High	Medium	High to Medium	Not Applicable





# Viewpoint VP17 - Stow/83/1

## Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerows and the distance. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerows, but the riparian vegetation bordering the River Till and the distance would provide some screening such that these activities would be confined to a narrower section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a small portion of the view and not become a dominant feature. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact, and the layering would help with the integration of the panels at this location. There would not be a fundamental change to the surroundings to the south and east of this location.

## **Construction Access**

Viewpoint will not be affected by construction traffic due to the distance between the viewpoint and the proposed construction access.

## Cable Route Corridor

Viewpoint is outside of the 0.5km study area.

# **Operation (Year 1)**

The foreground that is bordered to each side by arable land use would not change. The views are 'all-round' and open since there are no hedgerows to each side of the footpath and this would not change. The hedgerows to each side of Ingham Road are also low cut allowing extended visibility towards the south across the extensive arable landscape, but they would provide some screening in the foreground and help shield the presence of any panels to the south. The middle-distance views then extend across the open arable landscape with woodlands and shelterbelts on the far distant horizon where the panel areas are located. This woodland and hedgerows would help the panels sit comfortable in the landscape. To the right of the view, the course of the River Till and associated shelterbelt vegetation would remain as the key features but extended views towards the small settlement of Stow Pasture would experience a small change to the view and change to the existing landscape elements. To the left of the view, there is middle ground visibility as far as the residential property known as Furze Hill and then extended views as far as the ridgeline and woodland at Ingham Cliff which would not alter.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

## Scattered tree belt

A scattered tree belt is proposed to the southeast of this viewpoint, offsetting Site/Sites 20m from the existing watercourse in field E5 and increasing the tree cover locally.

Further shelterbelts are proposed to the southern extent of field E1 and the northern extent of field E2, again creating a 20m buffer between the Scheme and the River Till.

## Existing hedges

Existing hedges to the north and south of field D4 and to the south of field D3 are to be enhanced with additional hedgerow trees to increase the level of tree cover locally and to reinforce the natural and historical field patterns.

To the southeast of this viewpoint northern and western hedgerows to field D26 and the western boundary of D24 are to be enhanced, being allowed to grow out to a height of 5m with additional hedgerow

# Operation (Year 15)

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below. At Year 15, the proposed new scattered tree belts and enhanced hedgerows will have established to create a strong field structure and screen views of the Scheme. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the close-range, the hedgerows will screen Site/Sites with mid and longer distance views appearing as a layered well-treed landscape with a backdrop of strong woodland features to some views with more distant horizons of hedgerow trees and some areas of woodland. The open character of the River Till at this point will be maintained with occasional areas of enclosure.

**Overall**, in terms of mitigation for the Cottam 1 Site/Sites, hedgerow trees are scarce and limited to oak and ash, with willow along watercourses. The flowing tributaries of the River Till have formed small valleys which are barely evident due to the lack of riparian vegetation. The shift away from mixed farming has impacted upon areas of pasture and grassland habitats, which has had an impact upon local character and biodiversity. The watercourses are not readily distinguished in the landscape due to the lack of waterside trees and riparian habitats and so they would be a main focus for mitigation.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

# **Decommissioning**

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



	Substation This viewpoint is within the 2km study area however it is not anticipated Cottam 1 substation would be visible due to intervening screening vegetation.	trees added to reinforce the character and mitigate views from the north along Ingham Road and from the northwest along the PRoW.  To the southheast, the southern boundaries of fields E5 and E6 are to be enhanced to mitigate views from the south and southeast whilst further defining the local field pattern.  New hedges  A new hedge is proposed to the north of field D3 where none exists to break up the existing large field. And reduce views south towards the immediate Site and that further to the south.  Grassland mixes  A tussock mix is proposed to the boundaries of existing and proposed hedges with flower rich pollinator mixes proposed on south and west facing hedge bases. Wildflower meadow mix is to be seeded beneath panels.  To the east of field E5, a tall herb mix is proposed adjacent to the watercourse to create a strong buffer to the river at this point. Field E6 is to be seeded with a bird mitigation mix.  To the southwest, fields D2 and D3 and fields D7 and D9 are to revert to floodplain meadow.  Adverse effects:  Panels and structures across the landscape Increased hard standing areas  Increased traffic locally  Some minor light pollution within open countryside  Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	
Magnitude	Low	Low	Very Low	Very Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Minor <b>Not Significant</b>	Minor Not Significant	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint VP17 – Stow/83/1		
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are	In Summary  The Cumulative Effects upon viewpoint 17 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.  Fabric of the Landscape	
	anticipated.	There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant



# Viewpoint VP18 - St Edith's Church and Coates Hall

#### **Viewpoint Baseline:**

The view is located at St Edith's Church and Coates Hall, looking south towards the Cottam 1 South Site and north towards Cottam North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying almost flat landscape within the wider context of a broad vale, which is conspicuous in this view. The land use is mainly productive arable farmland with many of the large fields under single crop. There is some deciduous woodland including a large, irregular woodland block to the southeast (left of view) including woodland at Cammeringham Low Covert and Brattleby Gorse. There are also poplar shelterbelts immediately to the west (right of view). The pattern of drainage is hardly evident as the River Till is only just notable to the south of the view where it takes a meandering course towards Normanby by Stow. The watercourse winds though the landscape and is hardly discernable except for a minor tracing of alder and willow trees. In terms of man-made elements, the listed buildings of Coates Hall and St Edith's Church are the main built elements of this location along with the large-scale agricultural buildings associated with the farmstead. Other built elements include the farmsteads at Furze Hill and Lower Furze Hill to the south. Visibility towards other farmsteads in the east is shielded by intervening woodland blocks including Coates Gorse just to the west of Coates Farm,

<u>Subjective:</u> The viewpoint depicts an exposed, large-scale landscape, that is open in nature due to the absence of hedgerow trees and woodland cover in the foreground. In terms of variety, the landscape is uniform and mostly consistent, and it lacks interest other than the bridge crossings that lends a distinctive 'sense of place'. These views extend as far as the Limestone Scarps and Dipslopes Character Area 6a where the woodlands at Cammeringham and Brattleby form a distinctive feature on the horizon. In terms of texture and colour, the fields are under single crop, and this gives a monochrome appearance, however the woodland blocks add contrast to the view.

<u>Overall:</u> The viewpoint is influenced by the presence of the listed buildings at St Edith's Church and Coates Hall. The River Till that passes beneath Squire's Bridge but is hardly evident in the landscape due to lack of tree cover in this open landscape. There is however a strong presence of woodland in the distance that adds balance and interest to the view. The intensive levels of management within this arable farmland add decline to the natural qualities of the view, but the overall impression is that of a simple, calm and attractive landscape with pleasant views.

### **Receptors:**

The viewpoint is representative of views for residents living at Hall Farm and Coates Hall and for visitors to St Edith's Church.

## **Description of View:**

The foreground of the view is set in the context of St Edith's Church and Coates Hall within the small settlement of Coates. The location is bordered to each side by built form and existing vegetation. Ingham Road passes in an east west direction just to the south of the view. The views are focused and framed by the hedgerows to each side of the church grounds allowing extended visibility towards the south across the extensive arable landscape. Foreground views pass across the open arable field as far as Ingham Road where middle-distance is framed by the slight rise in landform at the small settlement of Thorpe le Fallows. There are also woodlands and shelterbelts on the far distant horizon. To the right of the view, the course of the River Till and associated shelterbelt vegetation are the key features with extended views towards the small settlement of Stow Pasture. To the left and right of the view, the existing vegetation within the church grounds closes down any visibility.





# **Receptor susceptibility to change**

In terms of forces for change for VP18, the landscape has a strong rural character, but tranquility levels are being disturbed by development pressures from the larger scale settlements and major routes across the area. Tranquility is however associated with the winding lanes and landscape-scale projects such as the Trent Vale Landscape Partnership can help by offering increased recreational and educational opportunities within these areas.

**Overall,** the susceptibility for VP18 is conditioned by the limited network of footpaths and bridleways and the availability of the rural roads and minor tracks for extended access. The relevant characteristics therefore have some scope to accommodate change without undue adverse effects. There is however scope to increase recreation opportunities including where there are natural features and historical elements to draw interest from residents and tourists.

High to Medium

# Value of view

<u>Scenic:</u> Views towards the Limestone Scarps and Dipslopes Character Area 6a part of key views across the area but the listed buildings of Coates Hall and St Edith's Church are the main built elements of this location along with the large-scale agricultural buildings associated with the farmstead.

<u>Cultural</u>: The landscape comprises the Coates medieval settlement and moated site (List Entry: 1016979). There are the remains of the medieval village, together with surviving parts of its open fields and surviving earthworks. These features represent the remains of a moated manorial complex, which formerly extended over the area now occupied by Coates Hall and Hall Farm.

<u>Natural:</u> There is a diverse character with hedgerows, woodland and hedgerow trees that create an intricate and textured landscape. In some places there are 'all round' views capturing this combination of features, but at Coates the views are enclosed and intimate capturing the listed buildings.

<u>Recreation and Enjoyment:</u> The Scarps and Dipslopes are valued for recreation which often focuses on the locations where the crests of ridges allow views across the area. Views within the Unwooded Vales Character Area 4a from these historic settlements are important locally.

<u>Local Distinctiveness and Sense of Place:</u> The landscape has a 'strong sense of place' with a subtle regimented character that is reinforced by the geometric patterns of fields. Locations where the regimented character is interrupted by sporadic settlement shrouded in tree cover are important 'nodes in the landscape.

<u>Health and Wellbeing:</u> The Scarps and Dipslopes provide a rural landscape that has remained largely intact and the landscape within the Vales is also intact but with agricultural intensification having an influence. There are locations where a time depth is important to landscape character such as the former medieval settlements.

<u>Important Spatial Function:</u> The landscape benefits from its low elevation, and the towards the elevated areas are an important spatial function.

**Overall,** the value of Viewpoint VP18 is shaped by the large-scale arable land use that creates a strong sense of identity. The extended views towards the scarp slope forms part of the landscape setting to these historic settlements. The 'all-round' views locally that capture other features such as woodland and hedgerows are also important.

Medium

# Sensitivity

Range of Features: This location comprises the small settlement of Coates within a wider, low-lying almost flat landscape. This is a part open location where the appreciation of the wider landscape is frame by vegetation to each side of the view. There is a limited number of features other than the immediate listed buildings and then distant views of woodland blocks on the horizon within the wider setting to the settlement of Coates.

Importance of View: This is within the church grounds, within the context of a small settlement. This being a listed building and a place of interest tourists with a strong sense of identity., this raises the level of importance of the view.

Number of Receptors: This location captures a limited range of receptors and is primarily a draw for visitors to the church and occasional walkers that may deflect from the public footpath (Stow/83/1). The location is also likely to capture some visitors from a wider area due to the presence of the medieval settlement of Coates.

**High to Medium** 

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Not Applicable





# **Viewpoint VP18 - St Edith's Church and Coates Hall**

# Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be screened due to the presence of the existing vegetation to each side of the view. During the latter part of the construction stage, views would not be available of the elevated activities above the hedgerow, since the distance and the riparian vegetation bordering the River Till would provide screening.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a small proportion of the view at an oblique angle. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact and help with layering and the integration of the new panels. There would not be a fundamental change to the surroundings to the south and east of this location.

## **Construction Access**

Viewpoint will not be affected by construction traffic due to the distance between the viewpoint and the proposed construction access.

# Cable Route Corridor

Viewpoint is outside of the 0.5km study area.

## **Substation**

# **Operation (Year 1)**

The foreground of the view set in the context of St Edith's Church and Coates Hall within the small settlement of Coates would not change. The location is bordered to each side by built form and existing vegetation and so the presence of the panels would be hidden from view. Ingham Road passes in an east west direction just to the south of the view and there will be a slight change to the view beyond the road where the panels are located to the west side of the course of the River Till. The views are focused and framed by the hedgerows to each side of the church grounds allowing extended visibility towards the south across the extensive arable landscape and the panels would not result in a change to this composition. Foreground views pass across the open arable field as far as Ingham Road where middle-distance is framed by the slight rise in landform at the small settlement of Thorpe le Fallows and the panels would occupy a small portion of the view and would not result in a change to the view's composition. To the right of the view, the course of the River Till and associated shelterbelt vegetation are the key features with extended views towards the small settlement of Stow Pasture, but these are oblique views, and any presence of the panels would occupy a small portion of this view. To the left of the view, there would be no change since the existing vegetation within the church grounds and the distance closes down any visibility.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

## Scattered tree belt

A scattered tree belt is proposed to the southeast of this viewpoint, offsetting the Scheme 20m from the existing watercourse in field E5 and increasing the tree cover locally.

Further shelterbelts are proposed to the southern extent of field E1 and the northern extent of field E2, again creating a 20m buffer between Site/Sites and the River Till.

#### Existing hedges

Existing hedges to the north and south of field D4 and to the south of field D3 are to be enhanced with additional hedgerow trees to increase the level of tree cover locally and to reinforce the natural and historical field patterns.

To the southeast of this viewpoint northern and western hedgerows to field D26 and the western boundary of D24 are to be enhanced, being allowed to grow out to a height of 5m with additional hedgerow trees added to reinforce the character and mitigate views from the north along Ingham Road and from the northwest along the PRoW.

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, the proposed new scattered tree belts and enhanced hedgerows will have established to create a strong field structure and screen views of the Scheme. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the close-range, the hedgerows will screen Site/Sites with mid and longer distance views appearing as a layered well-treed landscape with a backdrop of strong woodland features to some views to the southeast with more distant horizons of hedgerow trees and some areas of woodland in all directions. The open character of the River Till at this point will be maintained with occasional areas of enclosure.

**Overall**, in terms of mitigation for the Cottam 1 Site/Sites, there is significant benefit with appropriate tree planting that could be used in and around settlements to increase the occurrence of semi-natural habitats and maintain the perception of a 'well-treed' landscape.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



	This viewpoint is within the 2km study area but there would be no view of the Substation	To the southeast, the southern boundaries of fields E5 and E6 are to be enhanced to mitigate views from the south and	Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.	
		·		
		vegetation		
Magnitude	Very Low	Very Low	Very Low	Very Low
Type of Effect	Adverse & Short Term	Neutral & Long Term	Neutral & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint VF	iewpoint VP18 – St Edith's Church and Coates Hall				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]			
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are	In Summary The Cumulative Effects upon viewpoint 18 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.			
	anticipated.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.			
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area			
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.			
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:			
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]			
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.			
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.			
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low			
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term			
Significance Effect	Construction: Negligible Not Significant  Operation (Year 1): Negligible Not Significant  Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant				



# **Viewpoint VP20 - Normanby Road**

#### **Viewpoint Baseline:**

The view is located on the B1242 (Normanby Road), looking east directly onto the western extent of the Cottam 1 North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising a low-lying almost flat landscape within the wider context of a broad vale, which is evident in this view. The land use is mainly productive arable farmland with many of the large fields under single crop. There is some deciduous woodland including a large, irregular woodland block known as Normanby Gorse that is visible to the northeast (center of view) and tall tree cover associated with West Farm to the west (left of view) and East Farm (right of view) is also a distinctive feature. The mature tree cover along the green lane that leads to the settlement of Coates is also a notable feature, and the woodland around Hall Farm also stands out in the landscape. The open wide views to the east towards the Limestone Scarps and Dipslopes Character Area 6a are a key feature at this location. The view encompasses the River Till noted by the strong tracing of alder and willow trees and other riparian vegetation. In terms of man-made elements, the busy Normanby Road is intrusive and traffic speeds detract from the appreciation of the landscape since this is an open and straight section of road. The view is open since the field hedgerows are low cut and the road is relatively higher than the bordering arable landscape as it travels along a narrow spur of land projecting south from the settlement of Willingham by Stow. There is also the collection of 'flat-topped' houses that are typical to this locality, with a further collection of the same houses located on Ingham Road close at the junction with the green lane.

<u>Subjective</u>: The viewpoint depicts channeled and focused views over a wide arable landscape with regular field systems only disrupted by the sharply meandering course of the River Till and its associated vegetation. In terms of variety, the landscape is interesting with tree-lined green lanes, mature ash trees, arable fields, and deciduous woodland blocks. There is a sense of intactness in the view and this location along the B1242 has a distinctive 'sense of place' even though it is a busy section of road. In terms of texture and colour, the fields are under single crop giving a monochrome appearance, but the presence of mature trees, strong woodland blocks and robust hedgerows add interest to their monotony. The viewpoint depicts an exposed, large-scale landscape, that is open in nature and invigorating.

<u>Overall:</u> The view is influenced by the presence of the busy road, but this is surpassed by the invigorating nature of the views east towards the limestone capped ridgeline encompassing Ingham and Ingham Cliff. The foreground presence of the green lane and its mature tree cover enhance the quality of the view, and the riparian woodland and tree cover that follows the course of the River Till is also a distinctive feature. The overall impression is that of an intact and invigorating landscape with far-reaching views.

#### **Receptors:**

This viewpoint is representative of views available to users of Normanby Road. This section of the road leads from Stow in the south, past the flat top houses, towards the East Farm and West Farm. The lane is host to a variety of users including cyclists, horse riders, walkers and residents of East Farm and West Farm.

#### **Description of View:**

The foreground of the view comprises a large flat agricultural field divided by the deep-channeled course of the River Till. Further agricultural fields are not visible beyond this since this local collection of fields has very well-established and dense hedgerows. The middle and long distance therefore yields limited visibility across the agricultural fields. To the right-hand side of the view, there is the local farm track that leads to Coates and to the left-hand side of the view, the local farm track continues to meet with the B1241 (Normanby Road). The remainder of the horizon is made up of hedgerows, agricultural fields, and woodlands where visibility towards the middle and long distance is limited due to the strong hedgerow network. There are some vertical elements in the view, including telegraph poles and cables, but these are not notable elements in the context of this enclosed and well-treed landscape.





# Receptor susceptibility to change

In terms of forces for change for VP20, the woodlands in and around settlements are important to their setting particularly on the approach roads. The aim should therefore be to plan new woodland in the most suitable locations especially where woodland would help create a mixed pattern of land use.

**Overall,** the susceptibility for VP20 is conditioned by the presence of the north south road network that is part of the gateways to settlements along its length. The A156 is a major route that divides the Trent flood plain along with other north south routes such as the B1241. There is however scope to protect and enhance the natural character of the minor east west local road network to improve connectivity between the Till Vale and the Trent across major routes such as the A156 (Gainsborough Road). Minor roads that lead to the Trent from the A156 could be a key priority to build on connectivity. These relevant characteristics of the landscape therefore have a medium susceptibility to change without undue adverse effects due to the scope for improving biodiversity connectivity across the landscape.

Medium

# Value of view

Medium

<u>Scenic:</u> The broadleaved woodlands, copses and networks of hedgerows provide important habitats for farmland species. The network of woodlands to the west of the River Till and south of Normanby by Stow are notable features in the context of East Farm and West Farm.

<u>Cultural</u>: Very little semi-natural habitat remains across the area due to intensive agriculture. The smaller scale field systems within the context of East Farm and West Farm are important features in retaining habitat linkages due the concentrated framework of hedgerows.

<u>Natural</u>: The vegetation of the River Till is key in supporting some habitats and riparian woodland. These woodlands and their associated habitats are now less widespread in the locality and so where they appear in views across the area, they are an important natural quality.

<u>Recreation and Enjoyment:</u> This is mainly confined to the road networks including the busy B1241 (Normandy Road) due to lack of PRoW.

<u>Local Distinctiveness and Sense of Place:</u> The River Till displays many meanders in the section to the east of Normanby by Stow that gives the area its distinctiveness and sense of place. Where this meandering feature is connected to views across the area this is a key consideration.

<u>Health and Wellbeing:</u> The River Till is a key asset and there are road networks that connect to the river corridor that can be promoted for health and well-being. This section of the busy B1241 is connected to the bridge crossing over the River Till via the green lane that passes to the south of the residential properties know as Flat Tops.

<u>Important Spatial Function:</u> Within the Unwooded Vales Character Area 4a, the open arable fields and contrasting woodland blocks add to the spatial function of the area. Where they are present in publicly visible locations (especially in the context of the backdrop of the Scarps and Dipslopes Character Area 6a) the views are important.

**Overall,** the value of Viewpoint VP20 is shaped by the foreground with the predominant use of the land for agriculture interspersed with woodland blocks. There is very little semi-natural habitat due to the intensive arable use. The meandering course of the River Till appears in the view and this is an important natural quality to the landscape.

# Sensitivity

Medium

Range of Features: The location comprises the secondary road network that forms a north south connection between Sturton by Stow and Willingham by Stow. This is a local section of road where there are extended views that capture the course of the River Till that gives a distinctive grain to the landscape. The roadside hedgerows, mature trees and riparian vegetation create some level of visual containment and interest at this location.

Importance of View: This is part of the secondary road network at a location where there are extended views and features of interest, therefore raising the importance of the view

<u>Number of Receptors</u>: This location is primarily a draw for local residents using the road network to travel north south by car. The location is also likely to capture some visitors from a wider area as this is the secondary road network. This is not a recognised travel destination in the district.

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Not Applicable





# **Viewpoint VP20 - Normanby Road**

# Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would not be entirely screened due to the low height of the foreground hedgerows bordering the B1241. During the latter part of the construction stage, views would become available of the elevated activities, and although the hedgerows within the surrounding field systems would give some partial layering these activities would still occupy a small proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a small proportion of the view but would not become a dominant feature. There would not be a considerable change to the arable land use, and the surrounding field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the immediate north, south and west of this location and in the wider landscape to the west would not fundamentally change.

### **Construction Access**

This viewpoint will be affected by the road access onto Normanby Road to the west through field F2.

#### **Cable Route Corridor**

# Operation (Year 1)

The foreground of the view would not change from a large agricultural field since the area of panels are sets to the northeast side of the deep-channeled course of the River Till. Further agricultural fields beyond would be screened by the vegetation bordering the River Till and the hedgerow in the foreground. The tree cover associated with the local farm track that leads in two directions to Coates and the B1241 (Normanby Road) would remain a feature of the view but not in the context of the panels. The remainder of the horizon made up of woodlands would remain as a feature of the view but not in the context of the panels. The vertical elements in the view, including telegraph poles and cables would not add cumulative changes to the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

Scattered tree belts some 1400m to the east of this viewpoint may be visible in places along this route once fully established.

#### **Shelterbelt**

Shelterbelt planting to the west of field E1 will help to further screen the Scheme from the west.

#### **Existing hedges**

Existing hedges are more informal in this area but provide sufficient cover locally to protect views.

The eastern boundary of field F3 is to be enhanced and allowed to grow out with the addition of hedgerow trees, mitigating views from the east and creating another layer of vegetation when viewed from the west across the riparian landscape.

Views further northeast, although predominantly screened from view will be mitigated by new and enhanced hedgerow planting to fields G1 and G4.

#### Tussock Mix

A 14m wide block of tussock mix is proposed to the east of East Farm beyond the existing hedgerow creating a buffer between this and the spring sown cereal crop beyond.

#### Turtle Dove mitigation

Views east across the Site require little structural mitigation with existing vegetation and the longer-range views towards the site screening most views. Views across to the River Till are important and will be retained through the provision of Turtle Dove habitat creation in fields F1, F2 and F7 retaining the predominantly open nature of these fields. A 5m buffer of existing groundcover vegetation is to be retained adjacent to the River Till.

Elsewhere, a flower rich pollinator mix is proposed around field boundaries, with wildflower meadow planting under the proposed paneled areas.

#### **Grassland mixes**

A tall herb mix buffer of min. 30m and 50m wide in places is proposed either side of the River Till to retain the open feature and provide suitable riparian habitat around this waterway.

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

This view will become more enclosed since the proposed scattered trees and shelterbelts will have established to create a strong field structure and screen views of the solar panels in the mid distance beyond the River Till to the northeast. Existing hedges around the Site will have been managed to grow out to 5m reinforcing the vertical structure locally. In the close-range context, the existing hedgerows will screen the solar panels with mid and longer distance views appearing as a layered well-treed landscape with a backdrop of Normanby Gorse to the northeast and more distant tree lines to the south with the riparian tree cover around the River Till a distinctive feature.

Overall, in terms of mitigation for the Cottam 1
North Site, consideration should be given to the management of existing trees and woodland, which is a sensitive element of the Unwooded Vales
Character Area 4a. Enhancing biodiversity value and age structure through new planting and the creation of woodland edge habitats is therefore encouraged, particularly on approach to settlements. An increase in grassland reversion should also be encouraged, increasing the occurrence of semi-natural habitats.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.





	Viewpoint is outside of the 0.5km study area and there would be no view of this route.  North of the River Till in fields F3 and F6, a minimum 30m buffer will comprise predominantly tall herb mix with a tussock mix beyond and around the existing ditch and hedgeline running north.  Substation  This viewpoint is within the 2km study area. There are minor potential views to Cottam 1 substation.  Cottam 1 substation.  North of the River Till in fields F3 and F6, a minimum 30m buffer will comprise predominantly tall herb mix with a tussock mix beyond and around the existing ditch and hedgeline running north.  Adverse effects:  Panels and structures across the landscape  Increased hard standing areas  Increased traffic locally  Some minor light pollution within open countryside  Substation, Battery storage and other associated infrastructure structures visible above existing vegetation		Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	
Magnitude	Low	Low	Low	Very Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Neutral & Long Term	Neutral & Short Term
Significance of Effect	Minor <b>Not Significant</b>	Minor Not Significant	Minor <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint VP	int VP20 – Normanby Road		
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	In Summary  Between the Cottam 1 Site/Sites and the Cottam 2 Site, there would be no visibility due to distance, the intervening settlement of Stow and additional intervening hedgerows and tree cover, included established mature trees bordering each side of the green lane.	In Summary  The Cumulative Effects upon viewpoint 20 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. A combination of existing vegetation, Embedded and Secondary Mitigation proposed as well as existing topography would limit any cumulative visual effects. The closest Cumulative Development, Gate Burton Energy Farm, is located 1.1km northwest of viewpoint, however, due to the thick hedgerow and strong vegetation combined with the built form associated with West Farm it is anticipated there would be no cumulative visual effects.  Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
	Overall there would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and intervening vegetation. Therefore, no in combination visual effects are anticipated.	Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.  There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]  The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is	
		defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.	
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.	
Magnitude	Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low	
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Adverse & Long Term Decommissioning: Neutral & Short Term	
Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant	





# Viewpoint VP22 - Ingh/27/5

#### **Viewpoint Baseline:**

The view is located on PRoW, footpath (Ingh/27/5) looking northwest towards the Cottam 1 North Site and southwest towards the Cottam 1 South Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying, gently rolling arable landscape within the wider context of a broad vale, which adds to the sense of scale of this view. The land use is mainly productive arable farmland with many of the large fields under single crop. There is plantation woodland including Coates Gorse and New Plantation that forms a distinctive geometric pattern and is silhouetted on the horizon to the north (left of view). There are other geometric blocks including Cammeringham Low Covert, Long Covert and Brattleby Gorse to the south (far left of view). These woodlands combine to form a strong feature and a feeling of enclosure due to their localized concentration on the very gently rolling landform. In terms of man-made elements, there are occasional farmsteads including Low Farm that is just visible on the horizon (right of view). To the west (left of view) the settlement of Coates includes Grange Farm, Hall Farm, Coates Hall and Presswood Cottages. Shelterbelt vegetation is also evident to the west at Coates Hall. The horizon to the north closes views since the landform rises to a high point on Long Lane at approximately 20m AOD rising to approximately 30m AOD at the settlement edge of Ingham. Tree clumps are also visible in the horizon lining Ingham Road. Elsewhere, the bordering hedgerow to the south along Ingham Road and the small woodland thicket (Coates Gorse) and other riparian woodland help to frame views.

<u>Subjective</u>: The viewpoint depicts a large-scale, gently undulating, open landscape, being exposed at close-range and in the mid distance due to the absence of hedgerows. In terms of variety, the combination of landscape features includes farm buildings, plantation woodland, tall hedgerows, tree clumps, occasional hedgerow trees and arable fields. The view presents a simple, well-balanced composition, but the increased field sizes add some discordancy and feelings of this being an ordinary landscape. In terms of texture and colour, this is an intensively managed land use that is mainly muted in colour, but the woodland blocks add some textural interest. The view is influenced by the open arable fields and the woodlands on the horizon. The location offers some intimacy despite the open nature to the north and the strong line of trees that extend to the west into the adjoining open, arable field are distinctive.

<u>Overall:</u> The overall experience is interesting and very pleasant, with some depth to views and strong contrasting features. This is an isolated location with a distinct absence of settlement, built form or other man-made features. The overall experience of the view is interesting and pleasant.

#### Receptors:

This viewpoint is representative of views available to walkers using the PRoW (Ingh/2/5) leading from Long Lane in the north towards Ingham Road in the south.

#### Description of View:

The foreground of the view is set in the context of the public footpath that leads from the settlement of Ingham towards Coates. The location is bordered to each side by open arable fields which are lacking in boundary hedgerows. Stow Lane passes in an east west direction just to the south of the view. The views are focused and framed by the short row of mature trees just to the northwest of this location. Foreground views pass across the open arable field as far as Stow Road where middle-distance is framed by the collection of small woodlands to the west of Brattleby. To the right of the view, there is extended visibility but the slight change in landform curtails the views as far as the settlement of Coates. To the left of the view, visibility extends as far as the ridgeline and woodlands at Ingham Cliff on the far horizon.



several villages.

High to Medium



# In terms of forces for change for VP22, aims to protect existing rural landscape features, in particular the restoration of hedgerows since the most widespread change has been in agricultural intensification and the change from pastoral to arable cropping that has resulted in the loss of hedges, and consequently, increase in field size. The loss of pasture is particularly evident around

settlements, where grazing animals and smaller field

sizes contribute to the setting and structure of

**Receptor susceptibility to change** 

Overall, the susceptibility for VP22 is conditioned by the flat, open landscape and whilst the aim is to plan new tree planting around key settlements, woodland does not form a significant component of this landscape, and in considering its open and expansive character, extensive new woodland planting would be generally inappropriate. However, there is significant benefit with appropriate tree planting that could be used in and around settlements to increase the occurrence of seminatural habitats and maintain the perception of a 'well-treed' landscape. The relevant characteristics of the landscape therefore have a moderate ability to accommodate change without undue adverse effect.

# Value of view

<u>Scenic:</u> There are locations where panoramas are framed by larger areas of woodland or woodland is present on the horizon. Some panoramas include undulating landform, which accentuates the presence of the woodland. This feature is typical along the footpath (lngh/27/5).

<u>Cultural:</u> The landscape has small villages, hamlets, and farms and this includes the settlement of Coates and Yawthorpe and their outlying farmsteads including Low Farm and Blackthorn Hill that feature in the views from footpath (Stow/83/1).

<u>Natural:</u> Sizable areas of wet woodlands are also notable along the watercourses and tributaries associated with the River Till. Many of these woodlands form geometric shapes such as Coates Gorse, which borders the small watercourse to the west of Low Farm.

<u>Recreation and Enjoyment:</u> The Unwooded Vales Character Area 4a is valued for recreation which often focuses on the PRoW network with views towards the ridgeline. Other PRoW networks tend to have a north south focus and with an east west 'dog-leg' such as lngh/27/5 that give 'all-round' views across the area.

<u>Local Distinctiveness and Sense of Place:</u> The landscape has a 'strong sense of place' endorsed by the strong agricultural character. Wide areas retain a sense of rural tranquility and intactness away from the main road network. These areas can only often be reached by footpaths such as Ingh/27/5.

<u>Health and Wellbeing:</u> There is a limited network of PRoW meaning that the river floodplain can be the main focus for recreation. The footpath (Ingh/27/5) has views towards Coates Gorse and other riparian vegetation which borders the meandering watercourse to the west of Low Farm.

<u>Important Spatial Function:</u> Many village place names provide some evidence of 'time depth' with several woodlands being named after a local village such as Coates Gorse, indicating it once belonged to the community of Coates.

**Overall,** the value of Viewpoint VP22 is shaped by the distinctive character of the woodlands which are local landmarks. There are areas of deciduous and native woodland, including wet woodland but in recent decades agricultural intensification and farm amalgamation has led to a more homogenous landscape. Where these woodlands survive, such as Coates Gorse, they are important features.

Medium

# Sensitivity

Range of Features: This location comprises the public footpath network within a wider arable landscape. This is an open location where the appreciation of the landscape can be experienced in 'all-round' views. There is a limited number of features other than the immediate network of hedgerows and small woodland blocks on the horizon.

Importance of View: This is the local public footpath network located just off the local east west pattern of lanes. This footpath forming part of a well-connected network of footpaths and bridleways to the west of the settlement of Ingham offers views that are commonplace, which lowers the importance of the view.

Number of Receptors: This location captures view for walkers and is likely to be a draw for users from the local settlement of Ingham. The location may capture walkers from the wider area, but this is not a long-distance route and connectivity to string of settlements along the ridgeline (or east west settlements) is poor.

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

**High to Medium** Not Applicable





# Viewpoint VP22 - Ingh/27/5

# Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground features and the distance. During the latter part of the construction stage, views would become available of the elevated activities, but the riparian vegetation bordering the River Till and its tributaries would provide some screening such that these activities would be confined to a narrow section of the view resulting in a small change.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a small portion of the view and would not result in a change to the view's composition. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact and help integrate the panels into their setting. There would not be a fundamental change to the surroundings to the east and west of thus location.

#### **Construction Access**

All throughout the construction stage the viewpoint will be affected due to Ingham Road having a point of access into the Cottam 1 North Site. The access route is through a local track near Low Farm as it connects to fields C26 and C25.

#### Operation (Year 1)

The foreground of the view is set in the context of the public footpath that leads from the settlement of Ingham towards Coates would not change. The location is bordered to each side by open arable fields, and this would not alter. Stow Lane passes in an east west direction just to the south of the view where the panels would occupy a small portion of the view. The views are focused and framed by the short row of mature trees just to the northwest of this location and this would not change. Foreground views pass across the open arable field as far as Stow Road where middle-distance is framed by the collection of small woodlands to the west of Brattleby and the panel areas would form a small portion of this view, but not change its composition. To the right of the view, there is extended visibility but the slight change in landform curtails the views as far as the settlement of Coates and this would not change. To the left of the view, visibility extends as far as the ridgeline and woodlands at Ingham Cliff on the far horizon, which would remain as a feature of the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

Belts of scattered trees are proposed to the north around the northern boundary of field C28 and the eastern boundary of field C23 adjacent to the existing watercourse further mitigating views to the north and providing a strong feature around the watercourse as well as a suitable buffer between this and the Scheme.

#### Shelterbelt

To the north, the southern field boundary to C25 is to be enhanced with the addition of a 5m wide shelterbelt of native trees. This boundary, sitting beyond bird mitigation to the south will help mitigate views of the Cottam 1 North Site from the south.

A further block of shelterbelt planting is proposed to the eastern boundaries of C24 and C25 to mitigate views from the east and from the village of lngham.

#### Existing hedges

To the south of this viewpoint, where the Site is in close proximity, the existing northern boundary hedges of D30 and D34 are to be enhanced. These will be allowed to grow out and managed to a height of 5m whilst additional tree planting within the hedgerow will further mitigate views into the Scheme from the Ingham Road and PROW beyond to the north.

Existing hedges to the south of these fields are also to be enhanced breaking up the bulk of the panels and creating a stronger boundary to the track that runs west from Corringham with the addition of hedgerow trees to strengthen the character locally, mitigate views for horse riders and create additional visual interest along this route.

To the west of field D30, further hedgerow enhancement will help mitigate views further west from this viewpoint and the Ingham Road.

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, the mid-range view to the north will be of a field with low cover but strong field boundaries to encourage Turtle Dove and other bird populations. To the north, the enhanced hedgerow planting and shelterbelts having become well established in the mid distance will mitigate views of the panels and create a layered, multi-interest view with a strong backdrop of woodland on the distant horizon. Blocks of proposed native scattered trees on the east of the Site will help to add interest to the view and mitigate views further northeast. To the south, enhanced tree cover and hedgerows will have established and begun to mature to give close range views of well managed hedgerows with hedgerow trees. Further south, the scene offers a wooded horizon in places with longer distance views obscured by topography.

This viewpoint is in mid-close proximity to the Site at Cottam 1 South looking south and southwest. Mid-range views of Cottam 1 North may be possible.

**Overall**, in terms of mitigation for the Cottam 1 Site/Sites, there is significant benefit with appropriate tree planting that could be used in and around settlements to increase the occurrence of semi-natural habitats and maintain the perception of a 'well-treed' landscape.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.





	Cable Route Corridor		<ul> <li>Bird mitigation fields</li> </ul>	
	Viewpoint is outside of the 0.5km study area.	Reinforce hedgerow at the eastern boundary of field C26 to mitigate views from the PRoW. Introduce shelterbelt planting along the eastern boundary	Significantly improved biodiversity	
	Substation This viewpoint is within the 2km study area	of fields C23, C24 and C25.	Growth of existing and proposed vegetation is assumed to be:	
	but there would be no view of the Substation	New hedges		
	at Cottam 1.	A new hedgerow is proposed to the northern boundary of field D27 where none currently exists. The addition of hedgerow trees will help this boundary to integrate into the adjoining landscape and strengthen the field	Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.	
		pattern locally.	New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.	
		Turtle Dove/bird mitigation		
		A large field (C26) is to be provided for bird mitigation with low planting and bare patches to promote nesting and feeding. This field has a relatively	Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.	
		strong eastern boundary and a small area of woodland to the south helping to mitigate views of the Site from the south.	Shrubs: 0.9m at Year 1 and 5m at Year 15.	
		Grassland mixes Adjacent to existing hedgerows and proposed blocks of scattered trees, a tussock grass mix is proposed with a wildflower grass mix under the proposed panels. Areas of flower rich pollinator mix are proposed around other, predominantly south and west facing field boundaries as well as a 10m buffer around existing overhead power lines cables.  A tall herb mix is to be provided adjacent to existing watercourses in fields D28 and D34 creating a minimum 8m buffer to these minor watercourses.  Adverse effects:  — Panels and structures across the landscape		
		<ul> <li>Increased hard standing areas</li> <li>Increased traffic locally</li> <li>Some minor light pollution within open countryside</li> <li>Substation, Battery storage and other associated infrastructure structures visible above existing vegetation</li> </ul>		
Magnitude	Very Low	Very Low	Medium	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Minor Not Significant



Viewpoint VI	oint VP22 - Ingh/27/5			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Company on a	In Company of the Com		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint 22 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor.		
	combination visual effects are anticipated.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features.  Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



# Viewpoint VP23 - Ingh/27/5 and Ingham Road

#### **Viewpoint Baseline:**

The view is located at the junction with PRoW Public Footpath Ingh/27/5 and Ingham Road looking directly south over the Cottam 1 South Site and north towards the Cottam 1 North Site.

<u>Objective:</u> This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a low-lying, gently rolling arable landscape within the wider context of a broad vale, which adds to the sense of scale of this view. The land use is mainly productive arable farmland with many of the large fields under single crop. There is plantation woodland including Coates Gorse and other small woodlands that forms a distinctive group to the north (left of view). There are other geometric blocks of woodland to the south including Thorpe Wood, Cammeringham Low Covert and Brattleby Gorse to the west (left of view). These woodlands combine to form a strong feature and a feeling of enclosure due to their localized concentration on the gently rolling landform. In terms of man-made elements, there are occasional farmsteads including Low Farm that is just visible on the horizon (right of view) and Blackthorn Hill to the south.

<u>Subjective:</u> The viewpoint depicts a medium scale, gently undulating, partially enclosed landscape, being intimate at close-range but more open and exposed in the mid distance due to the absence of hedgerows. In terms of variety, the combination of landscape features includes isolated farm buildings, plantation woodland, tall hedgerows, occasional hedgerow trees and arable fields that present a simple, well-balanced landscape, but the increased field sizes add some discordancy. In terms of texture and colour, this is an intensively managed land use that is mainly muted in colour, but the gently undulating topography adds some interest.

Overall: The view is influenced by the open arable fields and the woodlands on the horizon that form a significant component and add balance to the landscape. The location offers some intimacy despite the open nature to the north due to the bordering hedgerows to each side of Ingham Road and the small woodland thicket (to the east) associated with the tributary of the River Till. The horizon closes down the view since the landform rises to a high point on Long Lane at approximately 20m AOD rising to 30m AOD at the edge of the settlement of Ingham. The overall experience is interesting and very pleasant, with some depth to views and strong contrasting features, and due to the presence of the plantation woodlands on the horizon and varied landform. Overall, Ingham Road is a strong feature in the view as it connects the settlements of Ingham in the east to Stow in the west, however the grass verges are a distinctive feature.

#### Receptors

This viewpoint is representative of views available to walkers using PRoW (Ingh/27/5), and motorists and residents travelling along Ingham Road.

#### **Description of View:**

The foreground of the view is set in the context of the public footpath that leads from the settlement of Ingham towards Coates and joins with Stow Lane. The location is bordered to each side by open arable fields which are lacking in boundary hedgerows. Stow Lane passes in an east west direction at this location of the view. The views are focused and framed by the presence of Stow Lane, which leads the views towards the west as far as Squire's Bridge and Stow Pasture and then leads view east as far as rising land just to the west of the settlement of Ingham. Foreground views pass across Stow Lane and then extend across the open arable field as far as the middle-distance which is framed by the collection of small woodlands to the west of Brattleby. To the right and left of the view, there is extended visibility along Stow Lane that leads to distant views in the west that capture the power industry associated with the River Trent on the horizon.



High to Medium

Medium



are formed on the historic heath at Morton and Laughton Commons, Other factors causing change to habitats has been animal grazing, although essation from heathland to woodland. Sycamore regeneration, aged tree stock and tree disease are also key factors in terms of landscape change and the high volume of dog walkers is also a consideration.  **Overall, the susceptibility for VP22 is conditioned by changes to the underlying geology and drainage patterns by intensive agriculture. The presence of the north south woodland blocks on the cast of the east of the woodland blocks on the cast of the landscape of the east and the Woodled Vales Character Area 4a is often enjoyed from the bordering areas such as the Limestone Scarp and Dipslopes Character and Enjoyment: The Unwooded Vales Character Area 4a is often enjoyed from the bordering areas such as the Limestone Scarp and Dipslopes Character and Enjoyment: The Unwooded Vales Character Area 4a is often enjoyed from the bordering areas such as the Limestone Scarp and Dipslopes Character and Enjoyment: The Unwooded Vales is therefore often the journey from east divides the Trent flood plain. The relevant character with the divides the Trent flood plain. The relevant divides the Trent flood plain. The relevant deverted the such as a such as the University between the Trent Stood plain and the divides the Trent flood plain. The relevant divides the Trent flood plain. The relevant deverted the such as a such as the University between the Trent flood plain. The relevant deverted the force of the such as a such		ALPHANIA PARAMETER AND		(6)
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In terms of forces for change for VP23, changes in soils structure and water table levels through agricultural activity has modified phaltasts. However, the woodlands that are least modified in the area are formed on the historic heath at Morton and Laughten Commons. Other factors causing change are leading to a succession from heathland to woodland. Syramore regeneration, aged tree stock and tree disease are also key factors in terms of landscape change and the high volume of dog wakers is also a consideration.  **Overall, the susceptibility for VP23 is conditioned by factors the underlying geology and drainage patterns by intensive agricultura. The presence of dog valkers is also a consideration.  **Overall, the susceptibility for the east. The A15 is a major router that this woodland is a major router that this woodland is also referred to a spiral way from major water course affects. The landscape here is an affect of the bind scape change and farming patterns by intensive agricultura. The presence of dog wakers is also a consideration.  **Overall, the value of Veryal is conditioned by distributed within the landscape change and farming patterns by intensive agricultura. The presence of dog wakers is also a consideration.  **Overall, the susceptibility for VP23 is conditioned by changes to the underlying geology and drainage patterns by intensive agricultura. The presence of dog wakers is also a consideration.  **Overall, the susceptibility for the east. The A15 is a major route that divides the Terric flood plain. The relevant character of the more divides the Terric flood plain. The relevant character of the minor east and the Woodsoft Wales Character Area 4 is in the well and the presence of the property for the presence of the west was to have the Terric from the innover all the property boundaries. In the local ready was the property for the presence of the property for th			A promotion of the control of the co	
is limited. Wews experienced at the junction between the PROW network and the agricultural activity has modified the habitats. However, the woodlands that are least modified in the area are formed on the historic heath at Morton and Laughtno Commons. Other factors causing change to habitats have been arrinal grazing although cessation has been leading to a succession from heathland to woodland. System regimenation, aged tree stock and tree disease are also key factors in terms of landscape change and the high volume of day wilkers is also a consideration.  Overall, the susceptibility for VP23 is conditioned by changes to the underlying scology and drainage patterns by intensive agriculture. The presence of the north south road network is a major route that divisits the Trent flood plain. The relevant characteristics of the landscape change and heather than the variety of the cast and the violed of the north south road network is also severs habitat connectivity between the Trent's flood plain. The relevant deviates the Trent flood plain. The relevant deviates a feet in the proper to a spring report the advanced floor the proper to a spring report and a feet floor to a spring relation to the proper to a spring relation of the plain and the Trent flood plain. The relevant deviates are flored to a spring rel	Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
drainage dykes that feed the River Till to the south and where these support  riparian vegetation, they are an important feature locally. In recent decades, the	In terms of forces for change for VP23, changes in soils structure and water table levels through agricultural activity has modified habitats. However, the woodlands that are least modified in the area are formed on the historic heath at Morton and Laughton Commons. Other factors causing change to habitats has been animal grazing, although cessation has been leading to a succession from heathland to woodland. Sycamore regeneration, aged tree stock and tree disease are also key factors in terms of landscape change and the high volume of dog walkers is also a consideration.  Overall, the susceptibility for VP23 is conditioned by changes to the underlying geology and drainage patterns by intensive agriculture. The presence of the north south road network also severs habitat connectivity between the Trent's flood plain and the Till Vale to the east. The A156 is a major route that divides the Trent flood plain. The relevant characteristics of the landscape therefore have some ability to accommodate change without undue adverse effects. There is scope to protect and enhance the natural character of the minor east west local road network to improve connectivity between the Till Vale and the Trent across major routes such as the A156 (Gainsborough Road). Minor roads that lead to the Trent from the A156 could be	Scenic: Views are often framed by large areas of woodland but access to footpaths is limited. Views experienced at the junction between the PROW network and the east west local lanes that capture these woodlands are important.  Cultural: The landscape shows evidence of small villages, hamlets and farms sparsely distributed within the landscape. This includes settlement of Coates with the Grade I listed Church of St Edith. Views towards church towers at Ingham and Cammeringham are also important.  Natural: There are large areas of native woodland juxtaposed with regular plantations and shelterbelts. These are evident in views towards the south where Cammeringham Low Covert, Long Covert, Brattleby Gorse and Polar Wood form an interesting group.  Recreation and Enjoyment: The Unwooded Vales Character Area 4a is often enjoyed from the bordering areas such as the Limestone Scarp and Dipslopes Character Area 6a to the east and the Wooded Vales Character Area 4b to the west. The focus for enjoyment within the Unwooded Vales is therefore often the journey from east to west.  Local Distinctiveness and Sense of Place: The landscape has a 'strong sense of place' endorsed by the strong woodland groups, with some areas retaining a sense of tranquility and remoteness, notably the central parts away from the east west road network.  Health and Wellbeing: There is a limited network of PRoW, but this is compensated by the local lanes as the main focus for experiencing the health and well-being qualities of the landscape.  Important Spatial Function: The landscape benefits from the woodland group that occupies the landscape to the south of Ingham Road.  Overall, the value of Viewpoint VP23 is shaped by the presence of the woodland group to the south of Ingham Lane that has a presence on the skyline and in the foreground of views. The landscape also possesses a framework of tributaries and	Range of Features: This location comprises the public footpath network within a wider arable landscape. This is an open location where the appreciation of the landscape can be experienced in 'all-round' views. There is a limited number of features other than the immediate network of hedgerows and small woodland blocks on the horizon. These woodlands also extend east to crown the scarp slope at Fillingham, Ingham and Brattleby.  Importance of View: This is the local public footpath network that joins with the local east west pattern of lanes. This footpath forming part of a well-connected network of footpaths and bridleways to the west of the settlement of Ingham offers views that are commonplace, which lowers the importance of the view.  Number of Receptors: This location captures view for walkers and is likely to be a draw for users from the local settlement of Ingham. The location may capture walkers from the wider area, but this is not a long-distance route and connectivity to string of settlements along the ridgeline (or	Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:  Panels to be set a minimum of 15m from adjacent PRoW.  Panels to be set a minimum of 50m from adjacent residential property boundaries.  Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.  Panels to be set a minimum of 3m from Site boundaries.  Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.  Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.  The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual
		impacting on landscape character and views across the area.	111 1	Not Applicable

High to Medium

Not Applicable





# Viewpoint VP23 - Ingh/27/5 and Ingham Road

#### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Stow Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the hedgerows bordering Stow Lane would provide some screening such that these activities would be confined to a narrower section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a small portion of the view but would not become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact and help with screening in the foreground. There would not be a fundamental change to the surroundings to the east and west of this location.

# **Construction Access**

All throughout the construction stage the viewpoint will be affected due to Ingham Road having a point of access into the Cottam 1 North Site. The access route is through a local track near Low Farm as it connects to fields C26 and C25.

# **Operation (Year 1)**

The foreground of the view is set in the context of the public footpath that leads from the settlement of Ingham towards Coates and joins with Stow Lane would not change. The location is bordered to each side by open arable fields which are lacking in boundary hedgerows, and this would not change. Stow Lane passes in an east west direction at this location of the view and the views beyond this would change to show the presence of panels. The views are focused and framed by the presence of Stow Lane, which leads the views towards the west as far as Squire's Bridge and Stow Pasture and then leads view east as far as rising land just to the west of the settlement of Ingham and this would not change. Foreground views pass across Stow Lane and then extend across the open arable field as far as the middledistance which is framed by the collection of small woodlands to the west of Brattleby and this would change to an area of panels but set back from this location behind hedgerows and intervening small woodland. To the right and left of the view, there is extended visibility along Stow Lane that leads to distant views in the west that capture the power industry associated with the River Trent on the horizon and this would not change.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

Belts of scattered trees are proposed to the north around the northern boundary of field C28 and the eastern boundary of field C23 adjacent to the existing watercourse further mitigating views to the north and providing a strong feature around the watercourse as well as a suitable buffer between this and the Scheme.

#### <u>Shelterbelt</u>

To the north, the southern field boundary to C25 is to be enhanced with the addition of a 5m wide shelterbelt of native trees. This boundary, sitting beyond bird mitigation to the south will help mitigate views of the Cottam 1 North Site from the south.

A further block of shelterbelt planting is proposed to the eastern boundaries of C24 and C25 to mitigate views from the east and from the village of lngham.

#### Existing hedges

To the south of this viewpoint, where the Site is in close proximity, the existing northern boundary hedges of D30 and D34 are to be enhanced. These will be allowed to grow out and managed to a height of 5m whilst additional tree planting within the hedgerow will further mitigate views into the Schme from the Ingham Road and PRoW beyond to the north.

Existing hedges to the south of these fields are also to be enhanced breaking up the bulk of the panels and creating a stronger boundary to the track that runs west from Corringham with the addition of hedgerow trees to strengthen the character locally, mitigate views for horse riders and create additional visual interest along this route.

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, the mid-range view to the north will be of a field with low cover but strong field boundaries to encourage Turtle Dove and other bird populations. To the north, the enhanced hedgerow planting and shelterbelts having become well established in the mid distance will mitigate views of the panels and create a layered, multi-interest view with a strong backdrop of woodland on the distant horizon. Blocks of proposed native scattered trees on the east of the Site will help to add interest to the view and mitigate views further northeast. To the south, enhanced tree cover and hedgerows will have established and begun to mature to give close range views of well managed hedgerows with hedgerow trees. Further south, the scene offers a wooded horizon in places with longer distance views obscured by topography.

This viewpoint is in close proximity to the Site at the Cottam 1 South Site looking south and southwest. Mid-range views of the Cottam 1 North Site may be possible.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.



	Cable Route Corridor Viewpoint is outside of the 0.5km study area.  Substation This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	To the west of field D30, further hedgerow enhancement will help mitigate views further west from this viewpoint and the Ingham Road.  New hedges  A new hedgerow is proposed to the northern boundary of field D27 where none currently exists. The addition of hedgerow trees will help this boundary to integrate into the adjoining landscape and strengthen the field pattern locally.  Turtle Dove/bird mitigation  A large field (C26) is to be provided for bird mitigation with low planting and bare patches to promote nesting and feeding. This field has a relatively strong eastern boundary and a small area of woodland to the south helping to mitigate views of the Site from the south.  Grassland mixes  Adjacent to existing hedgerows and proposed blocks of scattered trees, a tussock grass mix is proposed with a wildflower grass mix under the proposed panels. Areas of flower rich pollinator mix are proposed around other, predominantly south and west facing field boundaries as well as a 10m buffer around existing overhead power lines cables.  A tall herb mix is to be provided adjacent to existing watercourses in fields D28 and D34 creating a minimum 8m buffer to these minor watercourses.  Adverse effects:  Panels and structures across the landscape Increased traffic locally Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure structures visible above existing vegetation		
Magnitude	Low	Medium	Medium	Very Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Minor-Moderate <b>Not Significant</b>	Moderate <b>Significant</b>	Moderate Significant	Negligible <b>Not Significant</b>



viewpoilit vi	23 - Ingh/27/5 and Ingham Road		
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	In Summary	In Summary.	
	There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	The Cumulative Effects upon viewpoint 23 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor.  Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]	
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.	
		Overall Landscape Character and Visual Amenity	
		Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.	
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low	
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term	
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant	



# Viewpoint VP30 - Junction of High Steet and the B1398

#### **Viewpoint Baseline:**

The view is located at the junction of High Street and the B1398, looking west towards the Cottam 1 North Site and southwest towards the Cottam 1 South Site.

Objective: This viewpoint offers views from within the Limestone Scarps and Dipslopes Character Area 6a, towards the west over the Unwooded Vales Character Area 4a. The landscape comprises of limestone capped scarp slope that extends towards a rolling lowland towards the west of Ingham. In terms of landform, the land falls away from the viewpoint from approximately 65m AOD towards the Vales, which varies between 20 to 25m AOD within the landscape to the south of Greystones Farm. The land use is predominantly productive arable farm with many of the large fields under single crop. There is deciduous woodland that stands out on the horizon and comprises Hare's Wood and Fox Covert and Pale Wood at Fillingham Park. Hedgerows enclose the fields and provide additional layering to the landscape which is crossed by farm tracks that are also prominent in the context of the adjoining hedgerows. In terms of landform, the land falls sharply to the west towards the Lincolnshire Rescue Kennels and then continues as an area of gentle undulations towards Coates where New Plantation, and woodland around the small settlement of Coates closes down views across the area. In terms of man-made features, there is the busy B1398 (Middle Street) where farmsteads are mainly located to the west of this road and include Park Farm and Cliff House. Other built influences include residential properties at Hillside Cottages and the settlement of Fillingham to the northwest (right of view) and Ingham to the southeast (left of view). The pattern of open arable fields and strong woodland blocks is a key feature of the view. In terms of man-made elements, mast, poles, and electricity pylons are evident in the foreground and the distance. There is also a contrasting range of settlements (small villages and hamlets and larger market towns) individual farmsteads and residential dwellings which are mostly shrouded in tree cover, but which add to the pattern of the landscape. Regular geometric blocks of woodland also dominate the views (to the west of

<u>Subjective:</u> The viewpoint depicts a large-scale landscape, being exposed at mid-range and distant locations due to the open nature of the view. The arable landscape to each side of Middle Street has a distinct absence of hedgerows. Fox Covert, Pale Wood, Round Planation and Hares Wood close down views towards the north, whereas in contrast the views towards the south are open due to a distinct lack of woodlands along the scarp at this location. The view provides a complex range of features that give an overall impression of an invigorating landscape. Fast-moving traffic is a significant detractor, and the close proximity of the road is unsettling. Hedgerows are a prominent feature on the rim of the scarp slope as they provide cover between land parcels, and this tends to dominate the foreground of the views. Fillingham Woods is located to the north (right of view) and closes down any views to the north. The view looks onto Fillingham settlement that is in the middle ground of the view with Hillside Cottages located to the foreground of the view. In the far distance, the glimpses of the Trent power industry add great interest and a sense of industrial context to the view.

<u>Overall:</u> The view is typical in character to the wider rolling arable landscape, which is invigorating and very pleasant where hedgerows and woodland add interest to the strong network of arable fields. The view is influenced by the presence of the combination of features in the wider context of the broad vale. There is an overriding impression of this being a landscape of a vast scale, with far-reaching views that are very pleasant and invigorating. The fast-moving traffic is a detractor at this location, however.

#### Receptors

This viewpoint is representative of views available to walkers, motorists, and residents along the eastern edge of the settlement of Fillingham.

#### **Description of View:**

The foreground of the view comprises junction of High Street and the B1398 with an arable field that slopes towards the west. There is a wide grass verge to the boundary with the highway, but no field hedgerow bordering the B1398 leaving open visibility across the arable field in the foreground. The woodland at Oak Walk closes down any further visibility towards the west and northwest from this location. The middle ground reveals further arable fields leaving the distant horizon as the main feature. The foreground is also framed by the residential dwellings at the eastern end of High Street, but otherwise views are open and expansive. In the far distance, the landscape forms a flat, low-lying presence where deciduous woodlands stand out in contrast to the open arable fields. The view mainly highlights the productive arable landscape with large fields and contrasting woodlands visible amongst hedgerows and hedgerow trees. The hedgerows add to the overall wooded context of the landscape due to the elevation of the view.





# Receptor susceptibility to change

In terms of forces for change for VP30, the landscape has a strong rural character, but tranquility levels are being disturbed by development pressures from the larger scale settlements and major routes across the area. Tranquility is however associated with the winding lanes and landscapescale projects such as the Trent Vale Landscape Partnership which can help by offering increased recreational and educational opportunities within these areas

**Overall,** the susceptibility for VP30 is conditioned by the limited network of footpaths and bridleways and the availability of the rural roads and minor tracks for extended access. The relevant characteristics therefore have some scope to accommodate change without undue adverse effects. There is however scope to increase recreation opportunities including where there are natural features and historical elements to draw interest from residents and tourists.

High

# Value of view

<u>Scenic:</u> The Trent floodplain is the key feature of this panoramic view and power industry on the banks of the River Trent in distant views contributes to the overarching scenic quality.

<u>Cultural:</u> There are many tranquil places for people to enjoy the area both for recreation and for local residents. For example, Fillingham Castle registered park and garden is Grade II listed where the castle is surrounded by gardens and pleasure grounds. The woodland associated with the castle is a key feature in the context of the view.

<u>Natural:</u> Woodland cover is low across the Unwooded Vales Character Area 4a because of the history of the land use for agriculture. The area has therefore retained little semi-natural habitat. The hedgerows which feature in the view provide the main habitats for farmland species and are almost substitute woodland.

Recreation and Enjoyment: The PRoW network extends across the ridgeline and footpath Fill/89/1 extends through the grounds of Fillingham Castle to meet with the B1398 (Middle Street) at the junction of High Street. The tree cover along High Street is also a strong feature and provides some intimacy at this location, but mast and poles dominate the skyline towards the settlement of Fillingham.

<u>Local Distinctiveness and Sense of Place:</u> This is a predominantly rural and sparsely settled area with small villages and dispersed farms, however the ridgeline is a busy location in close proximity to the B1398 that dilutes the 'sense of place'.

<u>Health and Wellbeing:</u> The view is invigorating and very pleasant where hedgerows and woodland add interest to the strong network of arable fields.

<u>Important Spatial Function:</u> There is an overriding impression of this being a landscape of a vast scale, with far-reaching views that are very pleasant.

**Overall,** the value of Viewpoint VP30 is shaped by far reaching views over the Unwooded Vales Character Area 4a, where the views extend as far as the River Trent and the Floodplain Valleys Character Area 3a. High

# Sensitivity

High

Range of Features: This location comprises a higher elevation within The Ridge Area of Great Landscape Value (AGLV) overlooking the Till Vale. This is a part open location with some built development and strong woodland cover to the north and east. Hedgerows are also absent from field boundaries in parts. There is an interesting range of features in the foreground that help frame the distant views over the Till Vale towards the Trent floodplain. The land dips sharply away to the broad low-lying vales of the River Till.

Importance of View: This is an elevated location within the AGLV and in close proximity to the Fillingham Conservation Area and Fillingham Castle Grade II Registered Park and Garden, which raises the level of importance of the view. The Limestone Scarps and Dipslopes Character Area 6a is valued for recreation which can include the long views west towards the Wooded Vales Character Area 4b. Although wider areas retain a sense of rural tranquility and intactness, this location adjacent to the B1398 (Middle Street) is a busy location. The view is however influenced by the presence of the combination of features in the wider context of the broad vale.

Number of Receptors: This is the junction of the secondary and local road network where the local road ascends the ridgeline to capture the long views west. This is also the junction of the public footpath network that forms an east west route between the A1500 (Ermine Street) and the Till Vale. Connections further to the east towards the dip slope and the settlement of Normandy-by-Spital are more abundant, which may extend the number of receptors from local users to those from a wider area.

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Not Applicable





# Viewpoint VP30 - Junction of High Steet and the B1398

#### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Thorpe Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the riparian vegetation bordering the River Till would provide some screening such that these activities would be confined to a narrower section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and east of Thorpe Lane.

#### **Construction Access**

The viewpoint will not be affected by construction traffic due to the distance between the viewpoint and the proposed construction access.

#### **Cable Route Corridor**

Viewpoint is outside of the 0.5km study area.

# **Operation (Year 1)**

The foreground of the view comprising the junction of High Street and the B1398 with an arable field that slopes towards the west would not change. There is a wide grass verge to the boundary with the highway, but no field hedgerow bordering the B1398 leaving open visibility across the arable field in the foreground, and this would remain open. The woodland at Oak Walk closes down any further visibility towards the west and northwest from this location and helps to conceal the presence of the panels within Cottam 1 North in the landscape. With Cottam 1 South the presence of the panels are screened by the intervening settlement of Fillingham and Ingham. The middle ground reveals further arable fields leaving the distant horizon as the main feature where the presence of the panels would occupy a small portion of the view and therefore would not result in a change to the views composition. In the far distance, the landscape that forms a flat, low-lying presence would not alter and the deciduous woodlands would continue to stand out in contrast to the open arable fields. The view mainly highlights the productive arable landscape with large fields and contrasting woodlands visible amongst hedgerows and hedgerow trees and the introduction of the panels would occupy a small portion of the view due to the screening woodlands in the foreground and the intervening hedgerows and tree cover beyond.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A large belt of scattered trees is proposed to run around the northern boundary of field C28 and the eastern boundary of field C23 adjacent to the existing waterway creating a strong buffer of mixed riparian species along its length. This will screen views from the east into the Site and will act as a buffer to views from the village of lngham 1km to the southeast. Further short sections of tree belt are to link lone field trees to the boundary vegetation further west.

#### Shelterbelt

A new shelterbelt is proposed to the northern boundary of fields C27 and C29 where the Site is set back from the field boundary and the property to the north on Willingham Road. This hedge/Site boundary is set back a minimum of 50m from the boundary of this dwelling mitigating views and creating a wide buffer to provide a suitable setting to the dwelling.

A 5m wide shelterbelt is proposed to the southern boundary of field C21 to help mitigate views south of the main part of the Site from the Willingham Road and to strengthen the field boundaries locally.

Further shelterbelts are proposed in fields C15 and C18 breaking up the views across to the west and enhancing the watercourse in these fields.

#### Existing hedges

Existing hedges along the Willingham Road will be enhanced as necessary, with the eastern boundary to field C19 being augmented with hedgerow trees and allowed to grow out to 5m.

Across the Site running broadly north south, the existing low hedges will be enhanced, allowed to grow out and be managed at a height of 5m and will be

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, this long-range view will have altered relatively little with occasional glimpses over the Site along the route looking down towards the valley. Existing vegetation will have matured somewhat, and new vegetation will have established but will not be mature. Proposed trees will help to screen any views into the Site and break up the overall view whilst creating a multi-layered landscape.

**Overall**, in terms of mitigation for the Cottam 1 Site/Sites the aim should be to manage existing trees and woodland, encouraging new planting to ensure a varied structure, whilst removing invasive species. The restoration of hedgerows and stone walls should be given priority, creating a stronger field pattern and helping to integrate new development into the landscape. The aim is also to also bring opportunities to restore grassland and areas of pasture. In view of the range of geological and geomorphological features, such as the limestone villages, it is important that practices are in place for their care, maintenance and management, and the promotion of their educational and interpretational interest.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural)
   management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors. With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.





	Substation	augmented with the addition of hedgerow trees to strengthen the field pattern and	<ul> <li>Potential animal grazing</li> </ul>	
	This viewpoint is within the 2km study area	further mitigate views across the Site.	<ul> <li>Reinstatement of historic field</li> </ul>	
	but there would be no view of the Substation		patterns	
	at Cottam 1.	New hedges	<ul> <li>Bird mitigation fields</li> </ul>	
		A new shelterbelt is proposed to the northern boundary of fields C27 and C29	<ul> <li>Significantly improved biodiversity</li> </ul>	
		where the Site is set back from the field boundary and the property to the north on		
		Willingham Road. This hedge/Site boundary is set back a minimum of 50m from	Growth of existing and proposed	
		the boundary of this dwelling mitigating views and creating a wide buffer to provide	vegetation is assumed to be:	
		a suitable setting to the dwelling.	Woodland/trees and shelterbelts: 2.5m	
		Where field boundaries are missing or gappy within the Site; again, running broadly	max at Year 1, 7.5m max at Year 15.	
		north/south, these will be infilled with new hedgerows to strengthen the field	max at rear 1, 7.3mmax at rear 13.	
		pattern and local character and mitigate views.	New hedgerows: 0.6m at Year 1 and 3.5m	
		pattern and rocal character and magace views.	at Year 15.	
		New hedges are also proposed to the eastern and western boundaries of fields C27		
		and C30 with the ditch line between the two being reinforced where existing	Existing hedgerows: 0.9m at Year 1 and	
		specimen trees exist. This will mitigate views from the east and reinforce the	5m at Year 15.	
		historical field pattern.		
			Shrubs: 0.9m at Year 1 and 5m at Year 15	
		A new hedgerow to the southern extents of fields B2 and B3 will mitigate views		
		north into this block of panels where the Site boundary extends across an existing		
		field and currently no hedgerow exists. Irregular spaced native trees along this new field boundary will enhance the local character and create added height to this		
		area.		
		Successional Scrub		
		Around Larch Plantation within the Site, successional scrub is proposed in order to		
		create a buffer around the woodland and to provide both visual and ecological		
		benefit with the woodland edge being layered towards the meadow mixes beyond.		
		Grassland mixes		
		A tall herb mix is proposed around existing watercourses, with a general width of 5-		
		10m depending upon the size of each ditch and its current surroundings.		
		To a contract of the contract		
		Tussock mixes are proposed to most field boundaries to create a natural edge to		
		existing and proposed hedgerows with a flower rich pollinator mix used where appropriate on south/west facing field boundaries and around existing services.		
		appropriate on south/west facing field boundaries and around existing services.		
		Adverse effects:		
		<ul> <li>Panels and structures across the landscape</li> </ul>		
		<ul> <li>Increased hard standing areas</li> </ul>		
		<ul> <li>Increased traffic locally</li> </ul>		
		<ul> <li>Some minor light pollution within open countryside</li> </ul>		
		<ul> <li>Substation, Battery storage and other associated infrastructure structures</li> </ul>		
		visible above existing vegetation		
Magnitude	Very Low	Very Low	Low	Very Low
Level of	- 7 - 7**			- 7
Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance				
of Effect	Negligible <b>Not Significant</b>	Negligible Not Significant	Minor Not Significant	Negligible Not Significant
		·	•	



Viewpoint VF	ewpoint VP30 – Junction of High Steet and the B1398		
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary The Cumulative Effects upon viewpoint 30 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor.	
	effects are afficipated.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]	
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.	
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.	
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low	
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term	
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant	



# Viewpoint VP33 - Fill/86/1 off Willingham Road

#### **Viewpoint Baseline:**

The view is located on PRoW, bridleway (Fill/86/1) off Willingham Road, looking southwest almost directly over the Cottam 1 North Site and southwest towards the Cottam 1 South Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a very gently undulating, low-lying landscape within the wider context of a rolling vale lowland. This landscape extends west from the foot of the limestone capped scarp slope which is host to the Limestone Scarps and Dipslopes Character Area 6a. The landform at this location extends to a local spur at Greystones Farm Glebe Farm on Willingham Road and this rising land closes down views towards the north. Greystones Farm and Glebe Farm are visible on the skyline along with their associated woodland cover. The footpath follows a north south alignment to reflect the field boundary and there are open views since the fields to each side have no boundary hedgerows and just a simple ditch with ruderal weed growth. The Larch Plantation that sits on the southern side of Willingham Road and to the east of Side Farm is only just visible on the horizon to the west (left of view) where the landform is at a lower elevation since this local spur of land also extends southwest from Greystones Farm and closes down views towards this direction. In terms of man-made features, the footpath is dominant in the landscape, otherwise there are little else in terms of built influence. New plantation is also visible on the distant horizon along with woodland associated with the settlement of Coates and the scattered trees in the hedgerows are also a prominent feature.

<u>Subjective:</u> The viewpoint depicts a large-scale, gently undulating, open landscape, being exposed at close-range and in the mid distance due to the absence of hedgerows. In terms of variety, the combination of landscape features includes farm buildings, plantation woodland, occasional hedgerow trees, tree clumps and arable fields that present a simple, well-balanced composition, but the increased field sizes add some discordancy. In terms of texture and colour, this is an intensively managed land use that is mainly of muted tones, but the gently undulating topography and the horizon woodland adds some interest and sense of scale. Overall, the landscape is simple but balanced.

Overall: The view is influenced by the open arable fields and the woodlands on the horizon that form a significant component and add balance to the landscape. The location offers no intimacy due to the higher elevation of the view, the lack of field hedgerows and the intensive arable land use. The horizon closes down the view since the landform rises to a high point on Willingham Road at approximately 20m AOD. The overall experience is interesting and very pleasant, with some depth to views and strong contrasting features due to the presence of the plantation woodlands on the horizon and varied landform. This is an isolated location with a distinct absence of settlement, built form or other man-made features giving an interesting and pleasant nature to the view.

#### Receptors

This viewpoint is representative of views available to walkers and horse riders using the PRoW (Fill/86/1) and motorists travelling between Glentworth, Fillingham and Ingham along Willingham Road.

#### **Description of View:**

The foreground of the view is set at bridleway (Fill/86/1) off Willingham Road. The foreground of the view remains open on both sides of the bridleway however distinctive hedgerow can be seen to the centre of the view running south along the bridleway. In the middle ground of the view hedgerow boundaries can be seen to the right side of the view breaking up the vast agricultural fields into smaller sections. In the far distance individual and clumps of trees along with woodlands such as Larch Plantation and New Plantation can be seen dominating the horizon to the west (right of view). To the right side of the view, built form associated with Greystones Farm can be seen to the middle ground. To the left side of the view woodlands such as Hare's Wood along with a woodland associated with a U-pond (north of Ingham) can be seen in the distant horizon to the east.





Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
In terms of forces for change for VP33, there are continuing aims to plan for small new woodlands, ensuring new planting schemes take full advantage of opportunities to enhance the Unwooded Vales. The aims should also be to ensure there is consideration of the relationship between Limestone Scarps and Dipslopes and Unwooded Vales to ensure new planting does not negatively impact upon the open character of the adjoining Landscape Character Type. The pressures are centered around existing woodlands that are often small and isolated and suffer from lack of management.  Overall, the susceptibility for VP33 is conditioned by the susceptibility of the Limestone Scarps and Dipslopes that rises above the Trent Vale and forms a prominent and distinctive landscape feature. The Roman roads are also a key consideration created to link London with York. Superimposed on the north south axis of the Roman road is a less dominant but nonetheless distinctive pattern of east west routes and field boundaries that add geometric character. The relevant characteristics of the landscape therefore have a moderate ability to accommodate change without undue adverse effects.	Scenic: The long views out to the east towards the limestone capped scarp slope and the small villages of local sandstone are the main contributors to the scenic quality views in this direction.  Cultural: There is evidence of Roman influence through the roads and tracks, and the east west roads across the area between the scarp slope and the Trent floodplain. The medieval settlement at Coates is a key feature of this landscape due to its woodland cover which forms a scattered group with other woodlands at Fox Covert, New Plantation and Larch Plantation.  Natural: The grass verges are a feature of Willingham Road, which although long and straight and these routes offer key biodiversity corridors across the landscape along with the wetland habitats associated with the tightly woven tributaries of the River Till.  Recreation and Enjoyment: The area is lacking in public rights of way (PRoW) connections but the local roads such as Willingham Road provide a sense of escapism and inspiration especially where there are long views towards the east at the junction with the PRoW network.  Local Distinctiveness and Sense of Place: The local distinctiveness is provided by the large-scale landscape with its west facing scarp known as the 'Cliff'.  Health and Wellbeing: This is evident through the sense of isolation associated with the east west roads and long views and distant woodlands on the horizon such as Larch Plantation to the west.  Important Spatial Function: The spatial function is defined by the exposed landscape of the limestone plateau that is occasionally broken by small plantation woodlands often sheltering dispersed farmsteads and large-scale agricultural buildings.  Overall, the value of Viewpoint VP33 is shaped by Willingham Road that provides a sense of escapism and inspiration, especially where there are long views towards the east and the scarp slope at Fillingham where Hare's Wood and Fox Covert are prominent on the horizon. The grass verges are also a feature of Willingham Road.	Range of Features: This location comprises the public bridleway network at the edge of the settlement of Fillingham. This is a part open location where the tall hedgerows and small woodland blocks close down some visibility. There is a limited range of features confined to hedgerows, woodland cover, and the east west local road network.  Importance of View: This is a part open location on the east west local road network at a point where two bridleways almost join in a north south direction, which slightly raises the level of importance of the view. The view is influenced by the presence of the combination of features, but they are only experienced in the close-range context of the Unwooded Vales Character Area 4a.  Number of Receptors: This is the public bridleway network that almost connects the settlements of Ingham and Glentworth. This route is likely to appeal more to local users than those from a wider area.	Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:  Panels to be set a minimum of 15m from adjacent PRoW.  Panels to be set a minimum of 50m from adjacent residential property boundaries.  Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.  Panels to be set a minimum of 3m from Site boundaries.  Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.  Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.  The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.
Medium	Medium	Medium to High	Not Applicable



# Viewpoint VP33 - Fill/86/1 off Willingham Road

# Construction Operation (Year 1)

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Thorpe Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the riparian vegetation bordering the River Till would provide some screening such that these activities would be confined to a narrower section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and east of Thorpe Lane.

#### **Construction Access**

All throughout the construction stage the viewpoint will be affected due to Willingham Road having 3 points of The foreground of the view is set at bridleway (Fill/86/1) off Willingham Road. The foreground of the view remains open on both sides of the bridleway however distinctive hedgerow can be seen to the centre of the view running

south along the bridleway and this would not change. In the middle ground of the view hedgerow boundaries can be seen to the right side of the view breaking up the vast agricultural fields into smaller sections. In the far distance individual and clumps of trees along with woodlands such as Larch Plantation and New Plantation can be seen dominating the horizon to the west (right of view). To the right side of the view, built form associated with Greystones Farm can be seen to the middle ground. To the left side of the view woodlands such as Hare's Wood along with a woodland associated with a U-pond (north of Ingham) can be seen in the distant horizon to the east.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A large belt of scattered trees is proposed to run around the northern boundary of field C28 and the eastern boundary of field C23 adjacent to the existing waterway creating a strong buffer of mixed riparian species along its length. This will screen views from the east into the Site and will act as a buffer to views from the village of Ingham 1km to the southeast. Further short sections of tree belt are to link lone field trees to the boundary vegetation further west.

#### Shelterbelt

A new shelterbelt is proposed to the northern boundary of fields C27 and C29 where the Site is set back from the field boundary and the property to the north on Willingham Road. This hedge/Site boundary is set back a minimum of 50m from the boundary of this dwelling mitigating views and creating a wide buffer to provide a suitable setting to the dwelling.

A 5m wide shelterbelt is proposed to the southern boundary of field C21 to help mitigate views south of the main part of the Site from the Willingham Road and to strengthen the field boundaries locally.

Further shelterbelts are proposed in fields C15 and C18 breaking up the views across to the west and enhancing the watercourse in these fields.

#### Existing hedges

Existing hedges along the Willingham Road will be enhanced as necessary, with the eastern boundary to field C19 being augmented with hedgerow trees and allowed to grow out to 5m.

Across the Site running broadly north south, the existing low hedges will be enhanced, allowed to grow out and be managed at a height of 5m and will be augmented with the addition of hedgerow trees to strengthen the field pattern and further mitigate views across the Site.

#### New hedges

# Operation (Year 15)

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, the proposed new hedgerows will have established to create a strong field structure and screen views of the Scheme. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the close-range, the hedgerows will screen Site/Sites with mid and longer distance views appearing as a layered well-treed landscape with a backdrop of strong woodland features to some views with more distant horizons of hedgerow trees.

This viewpoint looks south southwest over a large area of the Cottam 1 North Site

Overall, in terms of mitigation for the Cottam 1 Site/Sites, due to the exposed location of Ridge AGLV, the aim is to retain as many trees as possible and plant native trees particularly where it forms a continuous line at the foot of the steep slopes at the junction with the Till Vale. The aim is also to keep routes at the lower elevations and follow natural breaks of slope. The development and management of footpaths for short distance (2-3 mile) walks will open up local areas of landscape within these locations. Any interventions at these junctions should avoid straight alignments at angles to the natural grain in the land. Where waterways are enclosed by steep embankments there should be a priority to open up their presence in land landscape as a tourist

Add a new hedgerow to the northern boundary of fieldC27 and C29.

As the northeastern corner of the Scheme only starts halfway along the existing field, introduce woodland planting to the gap between C27, C29 and Willingham Road.

Add in hedgerows to the boundaries that separate fields C27, C29 and C30 to further mitigate views from the PRoW and Willingham Road

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.



	access into the Cottam 1 North Site. The first point of access is close to Glebe Farm as it leads to field B2. The second point of access is close to North Farm as it leads to fields A2 and A4. The third point of access is close to Turnpins Bungalows as it provides access to fields C3 and C4.  Cable Route Corridor Viewpoint is outside of the 0.5km study area.  Substation/s This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	A new shelterbelt is proposed to the northern boundary of fields C27 and C29 where the Site is set back from the field boundary and the property to the north on Willingham Road. This hedge/Site boundary is set back a minimum of 50m from the boundary of this dwelling mitigating views and creating a wide buffer to provide a suitable setting to the dwelling.  Where field boundaries are missing or gappy within the Site; again, running broadly north/south, these will be infilled with new hedgerows to strengthen the field pattern and local character and mitigate views.  New hedges are also proposed to the eastern and western boundaries of fields C27 and C30 with the ditch line between the two being reinforced where existing specimen trees exist. This will mitigate views from the east and reinforce the historical field pattern.  A new hedgerow to the southern extents of fields B2 and B3 will mitigate views north into this block of panels where the Site boundary extends across an existing field and currently no hedgerow exists. Irregular spaced native trees along this new field boundary will enhance the local character and create added height to this area.  Successional Scrub  Around Larch Plantation within the Site, successional scrub is proposed in order to create a buffer around the woodland and to provide both visual and ecological benefit with the woodland edge being layered towards the meadow mixes beyond.  Grassland mixes  A tall herb mix is proposed around existing watercourses, with a general width of 5-10m depending upon the size of each ditch and its current surroundings.  Tussock mixes are proposed to most field boundaries to create a natural edge to existing and proposed hedgerows with a flower rich pollinator mix used where appropriate on south/west facing field boundaries and around existing services.  Adverse effects:  Panels and structures across the landscape Increased traffic locally Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure cre	Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:  - Grassland reversion around field boundaries and PRoW - Increased woodland/vegetation cover - A more varied landscape - Improved (more natural) management of exiting vegetation - Less expanse of intensively managed arable land - A less exposed and windswept landscape - Water quality improvements - Potential animal grazing - Reinstatement of historic field patterns - Bird mitigation fields - Significantly improved biodiversity  Growth of existing and proposed vegetation is assumed to be:  Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.	
Magnitude	Low	structures visible above existing vegetation  Medium	Low	Very Low
	Advance O Chart Tarre	Advance O Long Torre	Danafisial 9 Lang Tayer	Navitual 9 Chart Tarra
Level of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Minor-Moderate <b>Not Significant</b>	Moderate Significant	Minor <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint VP33 - Fill/86/1 off Willingham Road				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary The Cumulative Effects upon viewpoint 33 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor.		
	combination visual circus are underpared.	<u>Fabric of the Landscape</u> There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape  Refer to Figure <b>8.15.2.1</b> [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



# Viewpoint VP34 - Fill/85/2

#### **Viewpoint Baseline:**

The view is located along the route of PRoW bridleway (Fill/85/2), looking in all directions towards the Cottam 1 North Site and south towards the Cottam 1 South Site. The view is also looking northwest towards the Cottam 2 Site.

<u>Objective:</u> This viewpoint offers views of an almost flat, low-lying landscape within the wider context of a rolling lowland that extends well beyond the foot of the limestone capped scarp slope. There are extended views where the boundary vegetation of the Site/Sites is evident in the context of the open field. The landform at this location falls to a low point and this helps is shielding the field in views from Willingham Road to the south. The footpath follows a 'dog-leg' alignment to reflect the field boundary and is shielded by the hedgerows that have grown tall and although gappy in parts it helps to provide enclosure and intimacy. The Larch Plantation that sits on the southern side of Willingham Road to the east of Side Farm is also clearly visible on the horizon where the landform is at a higher elevation than the bridleway.

<u>Subjective:</u> The viewpoint depicts a medium-scale landscape where the undulations in topography display a strong landscape pattern with the layering of hedgerows being a prominent feature. The landscape features are balanced with simple additions of farm buildings interspersed with tree cover. The landscape is managed and muted in colour, but overall, the view is not distinctive or 'out of the ordinary'.

<u>Overall:</u> The view is typical in character to the wider open and arable land use where the tall and outgrown hedgerows add some intimacy along the route of the bridleway. There is a sense of security and a safe quality to the landscape. Overall, the experience is bland but pleasant.

#### **Receptors:**

This viewpoint is representative of views available to walkers and horse riders along the bridleway (Fill/85/2) travelling between the settlements of Glentworth in the north and Willingham by Stow in the south.

A similar view is provided by Viewpoint VP35.

#### **Description of View:**

To the foreground of the view comprises of flat arable landscape with tall hedgerows sheltering the PRoW on its north and east side. The viewpoint looks to the southwest from PRoW Fill/85/2 towards Larch Plantation which stands out in the distance and is a key attractor in the flat landscape. The left and right side of the view tall hedgerows border the arable land, the gaps in the hedgerow provide for fleeting and small views into the surrounding arable landscape. There are a few mast poles adding vertical interest into the landscape. The view is enclosed and influenced by the surrounding hedgerows.



Medium



# **Receptor susceptibility to change**

In terms of forces for change for VP34, the productive cropping from large farmsteads gives a prevalence of large rectilinear fields bound by tightly cropped hedgerows. Active and re-used airfields along with communication masts and wind turbines are dominant features. Woodland plantations are scarce and should be managed to ensure their long-term survival as landscape features, increasing the context of native broadleaves where possible.

Overall, the susceptibility of the VP34 is conditioned by the lack of woodlands that only occur as small plantations with occasional sheltering copses. The long straight roads cross the area, but few have wide verges to support habitat networks, and many are through routes such as Kirton Road where traffic is fast moving providing an inhibited experience for visitors to the area. However, there is an opportunity to restore and introduce hedges in key locations to restore field patterns. The relevant characteristics of the landscape therefore have some ability to accommodate change without undue adverse effects given there is scope to manage the long-term survival of woodlands and protect wide grass verges as habitat linkages across the area.

# Value of view

Medium

<u>Scenic:</u> This region represents a major east-west link, connecting Lincolnshire with the North of England and the minor road network offers views over a local landscape that is, in parts, scenic with pleasant views. The network of PRoW such as this bridleway (Fill/85/2) are important linking places to capture these views

<u>Cultural:</u> The close proximity to Gainsborough as a major historic crossing on the River Trent to the west and the strategic location of Roman roads on the limestone capped scarp slope to the east give rise to a number of historic settlements in the intervening landscape. This includes Fillingham and associated Fillingham Conservation Area and Fillingham Castle registered park and garden (List Entry:10009) to the east.

<u>Natural:</u> The local roads are valuable wildlife corridors since they are often narrow country lanes with grass verges, hedgerows to both sides and high levels of tranquility.

<u>Recreation and Enjoyment:</u> The 'east west' travel direction of local lanes often links the older settlements moving in a more random pattern following minor roads. These roads such as Willingham Road, Fillingham Lane and Kexby Road that are popular for recreation as narrow country lanes.

<u>Local Distinctiveness and Sense of Place:</u> The landscape associated with Fillingham Lane, and Willingham Road derive their 'sense of place' from the woodland blocks that contrast with the intensive arable landscape.

<u>Health and Wellbeing:</u> Main roads are significant features in this landscape, but the minor road networks and their connecting PRoW are often refuges of tranquility bringing benefits for health and wellbeing.

<u>Important Spatial Function:</u> The local roads play an important role in wayfinding by linking several historic and distinctive smaller string of settlements with the PRoW network.

**Overall**, the value of Viewpoint VP34 is shaped by the bridleway network and local roads (that gain access to smaller villages) which are popular for informal recreation. The PRoW provides attractive destinations as further refuge from the narrow country lanes often with good levels of tranquility and isolation. The cultural value of these bridleways and roads in connecting historic settlements is also a key consideration in terms of value.

# Sensitivity

Range of Features: This location comprises the public bridleway network at the edge of the settlement of Fillingham. This is a part open location where the tall hedgerows, small woodland blocks and riparian vegetation lining the small tributary of the River Till close down some visibility. There is an intimate range of features confined at close range to a small bridge crossing over the small watercourse, the hedgerows, the woodland cover, and the scattered farmsteads. The powerful River Trent and its tributaries and other water courses within its flood plain provide a strong functional feature running through the landscape, some which contribute to the 'sense of place' locally.

Importance of View: This is a part open location at a small bridge crossing over a local watercourse, which slightly raises the level of importance of the view. The view is influenced by the presence of the combination of features, but they are only experienced in the close-range context of the Unwooded Vales Character Area 4a. The hedgerows along these roads form an important element of views across the area, especially where they breach the skyline such as the hedge along Willingham Road.

<u>Number of Receptors</u>: This is the public bridleway network that almost connects the settlements of Ingham and Glentworth. This route is likely to appeal more to local users than those from a wider area.

High

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Not applicable





# Viewpoint VP34 - Fill/85/2

Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Thorpe Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the riparian vegetation bordering the River Till would provide some screening such that these activities

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

would be confined to a narrower

section of the view.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the

# **Operation (Year 1)**

The foreground of the view comprises a mixed species hedgerows framing an arable field that slopes towards the west. There is a wide grass verge to the front of the hedgerow that borders the parking area. The presence of the hedgerow breaks up the middle ground of view leaving the distant horizon as the main feature. The foreground is also framed by deciduous trees to each side and the parking spaces are also placed within intermittent tree cover such that views towards the rear of the viewpoint are more filtered than those to the front (west part). In the far distance the landscape forms a flat, low-lying presence where deciduous woodlands such as North Carlton Covert and Scampton Gorse stand out in contrast to the open arable fields. The view mainly highlights the productive arable landscape with large fields and contrasting woodlands visible amongst hedgerows and hedgerow trees. The hedgerows add to the overall wooded context of the landscape due to the elevation of the view. To the right-hand side of the view, the tall hedgerow bordering the parking area close down views in that direction and likewise to the left of the view. The remainder of the horizon is made up of large skies with few vertical features other than the power industry of the River Trent floodplain in the far distance.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A large belt of scattered trees is proposed to run around the northern boundary of field C28 and the eastern boundary of field C23 adjacent to the existing waterway creating a strong buffer of mixed riparian species along its length. This will screen views from the east into the Site and will act as a buffer to views from the village of Ingham 1km to the southeast. Further short sections of tree belt are to link lone field trees to the boundary vegetation further west.

To the north of this viewpoint, further scattered tree belts are proposed to the eastern boundary of field B1 adjacent to the watercourse and to the north of field A3 helping to mitigate views of the Sites north and northeast as well as strengthening the character of the area locally and enhancing the overall level of tree cover.

#### Shelterhelt

A 5m wide shelterbelt is proposed to the southern boundary of field C21 to help mitigate views south of the main part of the Site from the Willingham Road and to strengthen the field boundaries locally.

Further shelterbelts are proposed in fields C15 and C18 breaking up the views across to the west and enhancing the route of the watercourse in these fields.

A shelterbelt is proposed across field A4 adjacent to north farm to create a strong buffer 15m north of the property boundary with panels offset 50m. This, together with the scattered tree belt to the west help to form a band of tall vegetation linking visually with Fillingham Low Wood.

#### Existing hedges

Existing hedges along the Willingham Road will be enhanced as necessary, with the eastern boundary to field C19 being augmented with hedgerow trees and allowed to grow out to 5m.

Across the Site running broadly north south, the existing low hedges will be enhanced, allowed to grow out and be managed at a height of 5m and will be augmented with the addition of hedgerow trees to strengthen the field pattern and further mitigate views across the Site.

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, the proposed new hedgerows will have established to create a strong field structure and screen views of the Scheme. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the close-mid-range, the hedgerows will screen Site/Sites with mid and longer distance views appearing as a layered well-treed landscape with a backdrop of strong wooded horizon.

This viewpoint looks south southwest over a large area of the Cottam 1 North Site as well as north to a smaller section of the Scheme north of the viewpoint.

Overall, in terms of mitigation for the Cottam 1 Site/Sites, due to the exposed location of Ridge AGLV, the aim is to retain as many trees as possible and plant native trees particularly where it forms a continuous line at the foot of the steep slopes at the junction with the Till Vale. The aim is also to keep routes at the lower elevations and follow natural breaks of slope. The development and management of footpaths for short distance (2-3 mile) walks will open up local areas of landscape within these locations. Any interventions at these junctions should avoid straight alignments at angles to the natural grain in the land. Where waterways are enclosed by steep embankments there should be a priority to open up their presence in land landscape as a tourist 'attraction'.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover

# **Decommissioning**

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.



SOLAR PROJECT			[Nererence, EN	010133/APP/C6.3.8.3.2.4.19] January 2023
	surroundings to the south and east of Thorpe Lane.  Construction Access All throughout the construction stage the viewpoint will be affected due to Willingham Road having 3 points of access into the Cottam 1 North Site. The first point of access is close to Glebe Farm as it leads to field B2. The second point of access is close to North Farm as it leads to fields A2 and A4. The third point of access is close to Turpin's Bungalows as it provides access to fields C3 and C4.  Cable Route Corridor Viewpoint is outside of the 0.5km study area.  Substation/s This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	New hedges A new hedgerow is proposed to the northern boundary of fields C27 and C29 where the Site is set back from the field boundary and the property to the north on Willingham Road. This hedge/Site boundary is set back a minimum of 50m from the boundary of this dwelling mitigating views and creating a wide buffer to provide a suitable setting to the dwelling.  Where field boundaries are missing or gappy within the Site; again, running broadly north/south, these will be infilled with new hedgerows to strengthen the field patter and local character.  New hedges are also proposed to the eastern and western boundaries of fields C27 and C30 with the ditch line between the two being reinforced where existing specimen trees exist. This will mitigate views from the east and reinforce the historical field pattern.  A new hedgerow to the southern extents of fields B2 and B3 will mitigate views north into this block of panels where the Site boundary extends across an existing field and currently no hedgerow exists. Irregular spaced native trees along this new field boundary will enhance the local character and create added height to this area.  Fields A1 and A4 are to be bounded on the east by a new hedge with hedgerow trees to mitigate views from the east and south east.  Successional Scrub Around Larch Plantation within the Site, successional scrub is proposed in order to create a buffer around the woodland and to provide both visual and ecological benefit with the woodland edge being layered towards the meadow mixes beyond.  Grassland mixes  A tall herb mix is proposed around existing watercourses, with a general width of 5-10m depending upon the size of each ditch and its current surroundings.  Tussock mixes are proposed to most field boundaries to create a natural edge to existing and proposed hedgerows with a flower rich pollinator mix used where appropriate on south/west facing field boundaries and around existing services.  Adverse effects:  Panels and structures across the landscape Increased traffic locally	<ul> <li>A more varied landscape</li> <li>Improved (more natural) management of exiting vegetation</li> <li>Less expanse of intensively managed arable land</li> <li>A less exposed and windswept landscape</li> <li>Water quality improvements</li> <li>Potential animal grazing</li> <li>Reinstatement of historic field patterns</li> <li>Bird mitigation fields</li> <li>Significantly improved biodiversity</li> <li>Growth of existing and proposed vegetation is assumed to be:</li> <li>Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.</li> <li>New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.</li> <li>Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.</li> <li>Shrubs: 0.9m at Year 1 and 5m at Year 15.</li> </ul>	
Magnitude	Low	Low	Very Low	Very Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Minor <b>Not Significant</b>	Minor Not Significant	Negligible Not Significant	Negligible <b>Not Significant</b>



Viewpoint VP34 - Fill/85/2				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary The Cumulative Effects upon viewpoint 34 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor.  Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



# Viewpoint VP35 - Junction of Fill/85/1, Fill/85/2, and Fill/767/1

#### **Viewpoint Baseline**

The view is located on public right of way (PRoW), bridleway (Fill/85/1, Fill/85/2, and Fill/6/1) looking 'all-round' over the Cottam North 1 Site and southwest towards the Cottam 1 South Site beyond.

Objective: This viewpoint offers views of an almost flat, low-lying landscape within the wider context of a rolling lowland that extends well beyond the foot of the limestone capped scarp slope. There are extended views where the boundary vegetation of the Site/Sites is evident in the context of the open arable fields. The landform at this location falls to a low point of approximately 15m AOD and this helps is shielding the location in views from Willingham Road to the south. The bridleway follows a 'dog-leg' alignment to generally reflect the field boundaries and is shielded by the hedgerows that have grown tall and although gappy in parts they still help to provide enclosure and intimacy. There is good woodland cover to the west and northwest of the view including Larch Plantation that sits on the southern side of Willingham Road to the east of Side Farm that is clearly visible on the horizon where the landform is at a higher elevation than the bridleway. There is also a further woodland block known as Larch Plantation that is located to the northwest of the view at Spitals Farm. These plantations and woodlands provide enclosure in views from the north and the west to this location. In terms of man-made elements, there is little influence of bult form other than isolated farmsteads at North Farm, Fillingham Grange and Glebe Farm. Mast poles are evident in the distance to the east towards North Farm (right of view).

<u>Subjective:</u> The viewpoint depicts a medium-scale, partially enclosed landscape where the undulations in topography help display the landscape pattern of hedgerows and geometric woodland blocks. The layering of hedgerows is a prominent feature in this location, which helps to close down views and add intimacy. In terms of variety, there hedgerows, deciduous woodland, tree clumps and hedgerow trees which form a balanced composition with occasional interruptions of farm buildings interspersed with tree cover, that help give a more complex nature to the view. In terms of colour and texture, the landscape is managed and muted and quite ordinary apart from the strong dark woodland blocks that contrast with the muted open fields. There few hedgerow trees to break up the skyline and so the woodland blocks form important features on the horizon. Overall, the view is not distinctive or 'out of the ordinary'.

<u>Overall:</u> The view is typical in character to the wider open and arable land use where the tall and outgrown hedgerows add some intimacy along the route of the bridleways. This intimacy is then contrasted with open parts where there are gaps in the hedgerows and views are extended towards woodland plantations framing the horizon, such as Larch Plantation. There are distant views towards Glentworth towards the northeast forming part of the Scarps and Dipslope Character Area 6a. There is a sense of security and a safe quality to the landscape. Overall, the experience is pleasant as the slightly rolling landform adds to the character and increases the scale. There is an overall bland context to the views due to the intensive arable land use, but the sense of isolation and tranquility is an appealing feature.

#### Receptors

This viewpoint is representative of views available to horse riders and walkers using the bridleway network (Fill/85/2, and Fill/6/1) that passes north south between Glentworth Grange and Willingham Road.

#### **Description of View:**

The foreground of the view comprises of open arable landscape broken up by thick, well-established hedgerows and hedgerow trees. The viewpoint looks to the northeast towards Cotam 1 North Site/Sites. The view in this direction is undisturbed as the arable fields in the immediate foreground are open and bordered by the PRoW and thick hedgerows. To the far distance of the view the land can be seen rising, bring views of local unnamed woodlands and nursery plantation. To the left of view the PRoW curves west and goes in the direction of North Farm before turning south and leading to Willingham Road. The PRoW is bordered to the north by thick hedgerow vegetation. To the right of view the arable land is open with distinctive scrub surrounding a local drain cutting across the field.





Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
In terms of forces for change for VP35, the watercourses and their tributaries are often impinged from following natural courses. There are constraints around introducing structural diversity into the river habitats, where geomorphological processes should be allowed to occur, thus also reducing the energy of flood flows and increasing flood storage capacity. The increasing demand for water resources in an area of low rainfall may limit agriculture, and/or impact on water quality and freshwater habitats.  Overall, the susceptibility of VP35 is potentially conditioned by climate change may bring drier summers, and which would exacerbate the low summer flows of the rivers in this area. This would impact on water quality and freshwater habitats, as well as reducing the availability of water. The relevant characteristics of the landscape therefore have some ability to accommodate change without undue adverse effects given there is scope to incorporate measures into cultivation to improve the structural condition of soils, for example by increasing the area of permanent grassland. The construction of reservoirs on farms to supply water for irrigation could be designed to enhance biodiversity and make a positive contribution to the landscape.	Scenic: This region represents a major east-west link, connecting Lincolnshire with the North of England and the minor road network offers views over a local landscape that is, in parts, scenic with pleasant views. The network of PRoW such as bridleway (Fill/85/1, Fill/85/2 and Fill/6/1) linking are important places to capture these views.  Cultural: The close proximity to Gainsborough as a major historic crossing on the River Trent to the west and the strategic location of Roman roads on the limestone capped scarp slope to the east give rise to a number of historic settlements in the intervening landscape. This includes Coates medieval settlement and moated site (List Entry: 1016979) to the southwest.  Natural: The local roads are valuable wildlife corridors since they are often narrow country lanes with grass verges, hedgerows to both sides and high levels of tranquility.  Recreation and Enjoyment: The east west travel direction of local lanes often links the older settlements moving in a more random pattern following minor roads. These roads such as Willingham Road and Fillingham are popular for recreation since they provide attractive destinations as narrow country lanes.  Local Distinctiveness and Sense of Place: The landscape associated with Fillingham Lane, and Willingham Road derive their 'sense of place' from the woodland blocks that contrast with the intensive arable landscape.  Health and Wellbeing: Main roads are significant features in this landscape, but the minor road networks and their connecting PRoW are often refuges of tranquility bringing benefits for health and wellbeing.  Important Spatial Function: The local roads play an important role in wayfinding by linking several historic and distinctive smaller string of settlements with the PRoW network.  Overall, the value of Viewpoint VP35 is shaped by the bridleway network and the local roads (that gain access to smaller villages) which are popular for informal recreation. The PRoW connects to these local roads since they provide attractive des	Range of Features: This location comprises the public bridleway network at the point where three routes converge. This is an open location where the tall hedgerows, small woodland blocks and riparian vegetation lining the small tributary of the River Till add some structure to the landscape but do little to close down visibility. The hedgerows, the woodland cover and the scattered farmsteads are the range of features in the view.  Importance of View: This is an open location at a point where three bridleways converge, which slightly raises the level of importance of the view. The view is influenced by the presence of the combination of features, but they are only experienced in the close-range context of the Unwooded Vales Character Area 4a. The hedgerows along these roads form an important element of views across the area, especially where they breach the skyline such as the hedge along Willingham Road.  Number of Receptors: This is the public bridleway network that almost connects the settlements of Ingham and Glentworth. This route is likely to appeal more to local users than those from a wider area. The strategic major road network is defined by important historic routes (north south) and the strategic minor road network also links several historic and distinctive smaller string of settlements (east west) across the area. This bridleway network enhances these connections for recreation and access in the wider context of the Till Vale.	Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:  Panels to be set a minimum of 15m from adjacent PRoW.  Panels to be set a minimum of 50m from adjacent residential property boundaries.  Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.  Panels to be set a minimum of 3m from Site boundaries.  Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.  Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.  The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.
High	Medium	Medium-High	Not Applicable





# Viewpoint VP35 - Junction of Fill/85/1, Fill/85/2 and Fill/767/1

Construction

# Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Thorpe Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the riparian vegetation bordering the River Till would provide some screening such that these activities would be confined to a narrower

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

section of the view.

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and east of Thorpe Lane.

#### **Construction Access**

# Operation (Year 1)

#### **Description of View:**

The foreground of the view comprises a mixed species hedgerows framing an arable field that slopes towards the west. There is a wide grass verge to the front of the hedgerow that borders the parking area. The presence of the hedgerow breaks up the middle ground of view leaving the distant horizon as the main feature. The foreground is also framed by deciduous trees to each side and the parking spaces are also placed within intermittent tree cover such that views towards the rear of the viewpoint are more filtered than those to the front (west part). In the far distance the landscape forms a flat, low-lying presence where deciduous woodlands such as North Carlton Covert and Scampton Gorse stand out in contrast to the open arable fields. The view mainly highlights the productive arable landscape with large fields and contrasting woodlands visible amongst hedgerows and hedgerow trees. The hedgerows add to the overall wooded context of the landscape due to the elevation of the view. To the right-hand side of the view, the tall hedgerow bordering the parking area close down views in that direction and likewise to the left of the view. The remainder of the horizon is made up of large skies with few vertical features other than the power industry of the River Trent floodplain in the far distance.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A large belt of scattered trees is proposed to run around the northern boundary of field C28 and the eastern boundary of field C23 adjacent to the existing waterway creating a strong buffer of mixed riparian species along its length. This will screen views from the east into the Site and will act as a buffer to views from the village of Ingham 1km to the southeast. Further short sections of tree belt are to link lone field trees to the boundary vegetation further west.

To the north of this viewpoint, further scattered tree belts are proposed to the eastern boundary of field B1 adjacent to the watercourse and to the north of field A3 helping to mitigate views of the Sites north and northeast as well as strengthening the character of the area locally and enhancing the overall level of tree cover.

#### Shelterbel

A 5m wide shelterbelt is proposed to the southern boundary of field C21 to help mitigate views south of the main part of the Site from the Willingham Road and to strengthen the field boundaries locally.

Further shelterbelts are proposed in fields C15 and C18 breaking up the views across to the west and enhancing the route of the watercourse in these fields.

A shelterbelt is proposed across field A4 adjacent to north farm to create a strong buffer 15m north of the property boundary. This, together with the scattered tree belt to the west help to form a band of tall vegetation linking visually with Fillingham Low Wood.

#### **Existing hedges**

Existing hedges along the Willingham Road will be enhanced as necessary, with the eastern boundary to field C19 being augmented with hedgerow trees and allowed to grow out to 5m.

Across the Site running broadly north south, the existing low hedges will be enhanced, allowed to grow out and be managed at a height of 5m and will be augmented with the addition of hedgerow trees to strengthen the field pattern and further mitigate views across the Site.

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, the proposed new hedgerows will have established to create a strong field structure and screen views of the Scheme. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the close-midrange, the hedgerows will screen Site/Sites with mid and longer distance views appearing as a layered well-treed landscape with a backdrop of strong wooded horizon.

This viewpoint looks south southwest over a large area of the Cottam 1 North Site as well as north to a smaller section of the Scheme north of the viewpoint.

**Overall**, in terms of mitigation for the Cottam 1 Site/Sites, due to the exposed location of Ridge AGLV, the aim is to retain as many trees as possible and plant native trees particularly where it forms a continuous line at the foot of the steep slopes at the junction with the Till Vale. The aim is also to keep routes at the lower elevations and follow natural breaks of slope. The development and management of footpaths for short distance (2-3 mile) walks will open up local areas of landscape within these locations. Any interventions at these junctions should avoid straight alignments at angles to the natural grain in the land. Where waterways are enclosed by steep embankments there should be a priority to open up their presence in land landscape as a tourist 'attraction'.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural)
   management of exiting vegetation

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land

is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain longterm improvements in biodiversity in the local area, all of which will benefit visual receptors.



	All throughout the construction stage the viewpoint will be affected due to Willingham Road having 3 points of access into the Site/Sites. The first point of access is close to Glebe Farm as it leads to field B2. The second point of access is close to North Farm as it leads to fields A2 and A4. The third point of access is close to Turnpins Bungalows as it provides access to fields C3 and C4.  Cable Route Corridor  Viewpoint is outside of the 0.5km study area.  Substation/s  This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	Irregularly spaced trees within enhanced existing and new hedgerows will mitigate views of the Site(s) for riders using the bridleway.  New hedges  A new hedgerow is proposed to the northern boundary of fields C27 and C29 where the Site is set back from the field boundary and the property to the north on Willingham Road. This hedge/Site boundary is set back a minimum of 50m from the boundary of this dwelling mitigating views and creating a wide buffer to provide a suitable setting to the dwelling.  Where field boundaries are missing or gappy within the Site; again, running broadly north/south, these will be infilled with new hedgerows to strengthen the field patter and local character.  New hedges are also proposed to the eastern and western boundaries of fields C27 and C30 with the ditch line between the two being reinforced where existing specimen trees exist. This will mitigate views from the east and reinforce the historical field pattern.  A new hedgerow to the southern extents of fields B2 and B3 will mitigate views north into this block of panels where the Site boundary extends across an existing field and currently no hedgerow exists. Irregular spaced native trees along this new field boundary will enhance the local character and create added height to this area.  Fields A1 and A4 are to be bounded on the east by a new hedge with hedgerow trees to mitigate views from the east and southeast.  Successional Scrub  Around Larch Plantation within the Site, successional scrub is proposed in order to create a buffer around the woodland and to provide both visual and ecological benefit with the woodland edge being layered towards the meadow mixes beyond.  Grassland mixes  A tall herb mix is proposed around existing watercourses, with a general width of 5-10m depending upon the size of each ditch and its current surroundings.  Tussock mixes are proposed to most field boundaries to create a natural edge to existing and proposed hedgerows with a flower rich pollinator mix used where appropriate on south/west facin	<ul> <li>Less expanse of intensively managed arable land</li> <li>A less exposed and windswept landscape</li> <li>Water quality improvements</li> <li>Potential animal grazing</li> <li>Reinstatement of historic field patterns</li> <li>Bird mitigation fields</li> <li>Significantly improved biodiversity</li> </ul>	
Magnitude	Low	Medium	Low	Very Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Minor <b>Not Significant</b>	Moderate Significant	Minor Not Significant	Negligible <b>Not Significant</b>



Viewpoint VP	35 – Junction of Fill/85/1, Fill/85/2 and Fill/767/1	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	la Company and	de Course and
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary The Cumulative Effects upon viewpoint 35 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor.  Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity
		Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape.  These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
		Construction: Very Low
Magnitude	No Change	Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant





**Viewpoint VP38 - South Lane** 

#### **Viewpoint Baseline:**

The view is located on South Lane, looking south and west directly over, and east towards the Cottam 1 North Site. This is also looking south towards the Cottam 1 South Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a slightly undulating, low-lying landscape within the wider context of a broad vale, which is conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop. There are some local variations in landform where the land rises to the west to a high point of approximately 20m AOD around Willingham by Stow and Kexby. To the north, the land rises to a local high point of approximately 15m AOD at Heaton's Wood and to the south there is a gentle fall towards the River Till, which takes a meandering course to the north of Normanby by Stow and to the east of Coates. Towards the east, the landform is generally flat at 10m AOD then rising gently towards the foot of the scarp slope from where the landscape then rises sharply towards the settlements of Fillingham and Ingham. In terms of enclosure, there are numerous woodland blocks that form strong geometric shapes in the landscape and collectively provide a dominant wooded horizon, particularly towards the east of the view. These woodlands include Fillingham Low Wood, New Plantation and Larch Plantation. To the west and north, the view is enclosed by the gently rising landform and the settlements, whereas to the south the landscape is more open with views extending over the River Till Vale. In terms of man-made features, there are isolated farmsteads at Lowfield Farm and Moor Farm on South Lane and Slate House Farm, Magin Moor Farm and Poplar Farm on Fillingham Lane. There are also residential properties at Moor Bridge, otherwise little else exists in terms of built influence. Occasional groups of conifer trees have a domestic character and the overhead wires that pass along the road network are also detractors. Both Fillingham Lane and South Lane and South Lane are prominent in the landscape due to their formal, straight langham.

<u>Subjective:</u> The viewpoint depicts a large-scale, open landscape that is vast. In terms of variety, the combination of landscape features includes farm buildings, plantation woodland, tree clumps, occasional hedgerow trees, hedgerows and arable fields that present a simple, well-balanced composition. In terms of texture and colour, this is an intensively managed land use that is mainly muted but the strong presence of geometric woodlands adds some interest. Grass verges are also a feature of these local lanes that add a 'sense of place', and the hedgerows have a good range of native species including hawthorn, elder, ash and dog rose that bring some colour into the landscape. The extended views through gaps in the tall hedgerows also add surprise and delight to views, especially where they capture the distant scarp slope, church towers or the Trent power industry to the west.

Overall: The view is influenced by the woodlands on the horizon towards the east that form a significant component and add balance to the landscape. This location offers some intimacy since this is a local lane with little traffic and there is no major settlement to disrupt the tranquility. The field hedgerows are cut back, and the arable land use is intensively managed. The mature ash trees within the hedgerows are also a strong feature. The overall experience is pleasant, with some depth to views and strong contrasting features due to the presence of the plantation woodlands on the horizon and the slight undulations in topography. This is an isolated, remote location with a distinct absence of settlement, built form or other manmade features.

#### **Receptors:**

This viewpoint is representative of views available to motorists, cyclists, walkers, horse riders and residents passing along South Lane from Fillingham Lane.

#### **Description of View:**

The foreground of the view comprises of South Lane facing southwest towards Cottam1 West Site. There is a wide grass verge to the front of the hedgerow that border South Lane. The presence of the hedgerow is strong as it breaks up the views to the surrounding arable land and dominates the foreground. To the left of view, the land slopes up bringing the arable land into view. The land is broken up by hedgerows and hedgerow trees standing tall into the horizon. To the right of view, South Lane travels north with strong hedgerows on either side and a few hedgerow trees to the western boundary hedgerow. The view is intimate and short with little to no views further than the tall hedgerows in the foreground.





In terms of forces for change for VP38, urban expansion on the edge of the main settlements has eroded the predominantly rural character. While the power stations and sugar beet factory provide a sense of place, their scale is very dominant. This is especially relevant to the coal powered power stations that stand in the flat low-lying landscape. Other major industrial developments are focused along the Trent flood plain corridor including industrial estates, sewage treatment works and active sand and gravel extraction sites. The aim should be to manage and further enhance access via the network of guiet lanes, villages, footpaths, and watercourses. Extension of the non-road network, especially where it can link people to the river corridors and other areas for recreation.

**Overall**, the aim is to ensure new developments are well-integrated with well designed, green infrastructure and resist new development that threatens tranquility. The aim is also to conserve the strongly nucleated character by encouraging new development to take place within the existing curtilage of settlements. Enhancing and promoting access to river corridors for recreation and health benefits. The relevant characteristics of the landscape therefore have some ability to accommodate change without undue adverse effects given the sensitivity of the rural roads and minor farm tracks. The edges of the villages, the sequence of views to the churches and the avenues and lines of trees on the approaches to farms are also sensitive features. The balance between clustered villages and their adjacent, outlying farmsteads is an important characteristic.

Medium

#### Value of view

<u>Scenic:</u> The land use is mainly productive arable farmland with many large fields under single crop. There are some local variations in landform and the hedgerows add some scenic quality to the views.

<u>Cultural</u>: Gainsborough, which is Britain's most inland port and one of the main market towns forms a contrast in scale with the settlements such as Willingham by Stow and Stow and is part of the local distinctiveness. The area around the Site/Sites is defined by compact villages and dispersed farmsteads.

<u>Natural:</u> To landscape is remote due to the poorly connected road networks, as a result, the landscape is devoid of large-scale landscape features and development.

<u>Recreation and Enjoyment:</u> The landscapes to each side of the Till Vale are the key focus for recreation such as the forest managed by the Forestry Commission, which mainly comprises Laughton Woods and Scotton Common.

<u>Local Distinctiveness and Sense of Place</u>: To the north and south of the area, the major road network is limited and connections via the minor lanes are disjointed. This creates a sparsely populated landscape which has retained some local distinctiveness and 'sense of place'.

<u>Health and Wellbeing:</u> The long views east to the scarp slope is a key aspect of health and well-being as with the views west towards the power stations.

<u>Important Spatial Function:</u> Smaller settlements and their wider landscape settings provide an important spatial function in terms of character, where they mainly comprise villages, farmsteads, and isolated residential dwellings.

**Overall**, the value of Viewpoint VP38 is shaped by an area that is relatively sparsely populated with isolated residential properties and farmsteads dotted throughout the surrounding countryside. There is a series of rural settlements where their settings contribute to the character of the landscape with the closest to the Site/Sites being Willingham by Stow and Stow.

Medium

#### Sensitivity

Range of Features: This location comprises the local road network at the point where the route extends into a local farm access. This is an enclosed location where the tall hedgerows, small woodland blocks and riparian vegetation lining the small tributary of the River Till add some structure to the landscape and help close down visibility. The hedgerows, the woodland cover, the riparian vegetation, and the scattered farmsteads are the range of features in the view.

Importance of View: This is an enclosed location at a point where the local road merges into a farm track, which dilutes the level of importance of the view. The view is influenced by the presence of the combination of features, but they are only experienced in the closerange context of the Unwooded Vales Character Area 4a. The hedgerows along these roads frame views across the area where there are gaps, otherwise views are close range and contained.

Number of Receptors: This is the local road network that has limited connections. This route is likely to appeal to a limited range of receptors, possibly confined to local users. The strategic major road network is defined by important historic routes (north south) and the strategic minor road network also links several historic and distinctive smaller string of settlements (east west) across the area. This local lane could enhance these connections for recreation and access in the wider context of the Till Vale, but access is limited, and it is not a public right of way.

#### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Medium Not Applicable





#### **Viewpoint VP38 - South Lane**

## Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Thorpe Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the riparian vegetation bordering the River Till would provide some screening such that these activities would be confined to a narrower section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and east of Thorpe Lane.

#### **Construction Access**

All throughout the construction stage the viewpoint will be affected due to South Lane having a point of access into the Cottam 1 North Site. The access point is between Lowfield Farm and Moor Farm as it connects to fields G2 and G3.

#### Cable Route Corridor

#### **Operation (Year 1)**

#### Description of View:

The foreground of the view comprises a mixed species hedgerows framing an arable field that slopes towards the west. There is a wide grass verge to the front of the hedgerow that borders the parking area. The presence of the hedgerow breaks up the middle ground of view leaving the distant horizon as the main feature. The foreground is also framed by deciduous trees to each side and the parking spaces are also placed within intermittent tree cover such that views towards the rear of the viewpoint are more filtered than those to the front (west part). In the far distance the landscape forms a flat, low-lying presence where deciduous woodlands such as North Carlton Covert and Scampton Gorse stand out in contrast to the open arable fields. The view mainly highlights the productive arable landscape with large fields and contrasting woodlands visible amongst hedgerows and hedgerow trees. The hedgerows add to the overall wooded context of the landscape due to the elevation of the view. To the right-hand side of the view, the tall hedgerow bordering the parking area close down views in that direction and likewise to the left of the view. The remainder of the horizon is made up of large skies with few vertical features other than the power industry of the River Trent floodplain in the far distance.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A small belt of scattered trees is proposed adjacent to the existing trees in the corner of field C1 adding to the overall bulk of vegetation in this location.

A scattered tree belt is proposed within field C3 to the northeast of this viewpoint linking an existing lone tree to the hedgerow to the north.

Another belt links a tree in field C4 to the eastern boundary of this field.

#### Shelterbelt

A 5m shelterbelt is proposed to the north and west of Turnpin's Bungalows and to the south and west of Turpin Farm to mitigate views of the Scheme from these properties.

A long shelterbelt will run west/east to the north of field C5 adjacent to the existing waterway creating a

#### Operation (Year 15)

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, the proposed scattered trees and shelterbelt will have established to create a strong field structure and screen views of the Scheme in the close-mid distance. Existing hedges around the Site will have been managed to grow out to 5m reinforcing the vertical structure locally. In the close-range, the existing hedgerows will screen Site/Sites with mid and longer distance views appearing as a layered well-treed landscape with a backdrop of distant tree cover to the west with woodland cover more pronounced to the east.

Overall, in terms of mitigation for the Cottam 1 Site/Sites, due to the exposed location of Ridge AGLV, the aim is to retain as many trees as possible and plant native trees particularly where it forms a continuous line at the foot of the steep slopes at the junction with the Till Vale. The aim is also to keep routes at the lower elevations and follow natural breaks of slope. The development and management of footpaths for short distance (2-3 mile) walks will open up local areas of landscape within these locations. Any interventions at these junctions should avoid straight alignments at angles to the natural grain in the land. Where waterways are enclosed by steep embankments there should be a priority to open up their presence in land landscape as a tourist 'attraction'.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

#### **Decommissioning**

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.





Viewpoint is within 0.5km study area and will experience effects at construction stage.

#### **Substation**

This viewpoint is within the 2km study area and Cottam 1 Substation may be visible in the distant view.

strong break across this large field and adding height and variation to the views across the Site.

Another long shelterbelt will run to the south of G1 and G3 running broadly east/west across this block, strengthening the existing field pattern and breaking up the views from all directions.

#### Existing hedges

Existing hedgerows to the northeast and east of field G4 are to be enhanced, infilling gaps as necessary and providing additional hedgerow trees to add height. The hedges are to be allowed to grow out and be maintained to a height of 5m.

#### New hedges

A new hedgerow is proposed to the eastern boundaries of fields G2 and G3 to mitigate views from the east.

A new hedgerow to the west of field C2 will mitigate views from the west and north and help to further strengthen the field structure locally, providing additional height with proposed hedgerow trees.

A new hedge is proposed to the southern boundary of field C5 and the eastern boundary of C6 which will further reinforce the field pattern and break up the bulk of the panelled area.

#### Successional scrub

A belt of successional scrub is proposed to the western boundary of field C3 adjacent to existing vegetation on this western boundary of the Site.

A strong buffer of successional scrub is proposed to run north/south and east either side of existing vegetation within fields C2,5 and 6 providing a layered visual effect and creating a natural buffer to this woodland block and increasing its overall mass.

#### Grassland mixes

A 10m tall herb mix buffer is to line each side of the existing watercourse running across the Site.

Elsewhere within the field boundaries, flower rich pollinator mixes are to be used with tussock mixes used adjacent to existing and proposed vegetation in places.

#### Adverse effects:

- Panels and structures across the landscape
- Increased hard standing areas
- Increased traffic locally
- Some minor light pollution within open countryside

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.

Shrubs: 0.9m at Year 1 and 5m at Year 15.





		<ul> <li>Substation, Battery storage and other associated infrastructure structures visible above existing vegetation</li> </ul>		
Magnitude	Low	Low	Low	Very Low
Level of Effect	Adverse & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Minor <b>Not Significant</b>	Minor Not Significant	Minor <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint VP	Viewpoint VP38 – South Lane		
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary The Cumulative Effects upon viewpoint 38 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor.  Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]	
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.	
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set	
Magnitude	No Change	within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.  Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low	
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term	
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant	



#### Viewpoint VP41 - Gltw/85/1 just off Kexby Road

#### **Viewpoint Baseline:**

The view is located on the PRoW, bridleway (Gltw/85/1) at the junction with Kexby Road, looking south towards the Cottam 1 North Site with Cottam 1 South Site beyond.

<u>Objective:</u> This viewpoint offers views over a very gently rolling landscape within the wider context of a broad valley that is fully conspicuous at this location. The land use is predominantly arable with mixed woodland visible to the southwest (left of view) comprising of Larch Plantation and Fillingham Low Wood, and to the south woodland cover on the horizon at Cammeringham and Brattleby is a strong dark feature. These views towards the far horizon (and the woodland that crowns the limestone capped ridgeline which follows the Roman road at Ermine Street) are a key feature within the landscape to the south Kexby Road. In terms of man-made elements, there is little built influence since the area is sparsely populated and the road network only comprises of the two east west roads (Kexby Road and Willingham Road) that link Willingham by Stow in the west with Glentworth and Fillingham in the east.

<u>Subjective:</u> The viewpoint depicts a large-scale, open landscape, being exposed and with far reaching views towards the distant horizon as far as Thorpe le Fallows. In terms of variety, the combination of features includes isolated farm buildings, deciduous woodland, plantation woodland, hedgerows and hedgerow trees that present a simple and well-balanced composition, with very few detractors other than the intensive arable land use that erodes the character. In terms of texture, this is a highly managed arable land use with a muted colour combination giving the impression of an ordinary landscape, however the far-reaching views to the south add an invigorating quality overall.

<u>Overall:</u> the bridleway is a prominent feature in the landscape as it heads south from Kexby Road with clear, far-reaching views. The lack of foreground hedgerow opens visibility and there are also very few intervening hedgerows that increases the sense of scale. The immediate view is typical of the local landscape character and the far-reaching open views are consistent with the wider landform characteristics of the area. The overall experience is pleasant but with some bland foreground features.

#### **Receptors:**

This viewpoint is representative of views available to PRoW users along bridleway Gltw/85/1. This section of the bridleway is used by walkers and leads from Kexby Road in the north to join Willingham Road in the south. The view is also experienced by motorists and residents using Kexby Road. There are no meaningful views towards the Site/Sites, due to distance, topography, and intervening layering of hedgerows.

#### **Description of View:**

The view comprises of junction of PRoW Gltw/85/1 with Kexby Road. There is a wide grass verge to either side of Kexby road. The view is open and undisturbed with little to no hedgerows or tall vegetation to add interest to the view. In the far distance of the view woodlands of Larch Plantation, New Plantation and woodlands associated with 'The Lake' north of Fillingham stand out in the horizon bringing structure to the view. Isolated trees bring stimulation to the view. To the left of view, built form associated with Glentworth Grange stands tall and brings structure to the otherwise open and bland landscape. To the right of view, Low Farm and Spitals farm can be seen with woodlands such as Ash Holt and Larch plantation can be seen standing tall in the horizon.





In terms of forces for change for VP41, there is homogenization of the landscape and loss of hedgerows. However, there is an opportunity to reinforce landscape character and build in more diversity across the area especially in terms of improvements to hedgerows but also in changing the proportion of conifer to broadleaved woodland and improvements to woodland edge species.

Overall, the susceptibility of VP41 is conditioned by the striking differences across the varying elements of the AGLV and that these can be appreciated across the landscape. There is an opportunity to use landscape mitigation to build upon these differences and bolster this landscape diversity. Particular areas for focus include the proportion of pasture to arable fields in particular those around the edges of settlements which are particularly important to their setting and form a subtle relationship. Within this AGLV, views are generally contained by tall hedgerows, woodlands, and tree groups, giving the landscape very limited capacity to accommodate change. The relevant characteristics therefore have a limited susceptibility to accommodate change without undue adverse effects. There is however robust hedgerows with smaller fields and many trees in these locations that assist with mitigation.

High to Medium

#### Value of view

Medium

<u>Scenic:</u> This region represents a major east-west link, connecting Lincolnshire with the North of England and the minor road network offers views over a local landscape that is, in parts, scenic with pleasant views. The network of linking local lanes (especially where they link with bridleways) are also important places to capture views.

<u>Cultural</u>: The close proximity to Gainsborough as a major historic crossing on the River Trent to the west and the strategic location of Roman roads on the limestone capped scarp slope to the east give rise to a number of historic settlements in the intervening landscape. This includes Glentworth and Glentworth Conservation Area to the east.

<u>Natural:</u> The local roads are valuable wildlife corridors since they are often narrow country lanes with grass verges, hedgerows to both sides and high levels of tranquility.

<u>Recreation and Enjoyment:</u> The east west travel direction of local lanes often links the older settlements moving in a more random pattern following minor roads. These roads such as Kexby Road are popular for recreation since they provide attractive destinations as narrow country lanes.

<u>Local Distinctiveness and Sense of Place</u>: The landscape associated with Kexby Road derives the 'sense of place' from the woodland blocks that contrast with the intensive arable landscape. These woodland blocks feature at 'right-angled' bends in the road and include Big Wood and Heaton's Wood.

<u>Health and Wellbeing:</u> Main roads are significant features in this landscape, but the minor road networks and their connecting bridleways are often refuges of tranquility bringing benefits for health and wellbeing.

<u>Important Spatial Function:</u> The local roads play an important role in wayfinding by linking several historic and distinctive smaller string of settlements with the PRoW network.

**Overall**, the value of Viewpoint VP41 is shaped by the bridleway network and the local roads (that gain access to smaller villages) which are popular for informal recreation. These local roads provide attractive destinations as narrow country lanes often with good levels of tranquility and isolation. Many of these roads, such as Kexby Road, also have open sections with no hedgerows that allow views across the landscape.

#### Sensitivity

**High to Medium** 

Range of Features: This location comprises the public bridleway network at the point where it joins with a local lane. This is an open location where the tall hedgerows, small woodland blocks and riparian vegetation lining the small tributary of the River Till add some structure to the landscape but do little to close down visibility. The hedgerows, the woodland cover and the scattered farmsteads are the range of features in the view. The powerful River Trent and its tributaries and other water courses within its flood plain provide a strong functional feature running through the landscape, which contribute strongly to the 'sense of place' where the local tributaries support riparian vegetation.

Importance of View: This is an open location at a point where a bridleway converges with a local lane, that plays a part in connecting the bridleway network between lngham and Glentworth, which slightly raises the level of importance of the view. The view is influenced by the presence of the combination of features but the absence of hedgerows along this section of the road enhance the open visibility across the area.

Number of Receptors: This is the public bridleway network that almost connects the settlements of Ingham and Glentworth. This route is likely to appeal more to local users than those from a wider area. The strategic major road network is defined by important historic routes (north south) and the strategic minor road network also links several historic and distinctive smaller string of settlements (east west) across the area. This bridleway network enhances these connections for recreation and access in the wider context of the Till Vale.

#### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Not Applicable





#### Viewpoint VP41 - Gltw/85/1 just off Kexby Road

#### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Thorpe Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the riparian vegetation bordering the River Till would provide some screening such that these activities would be confined to a narrower section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and east of Thorpe Lane.

#### **Construction Access**

Viewpoint will not be affected by construction traffic due to the distance between the viewpoint and the construction access.

#### **Cable Route Corridor**

Viewpoint is outside of the 0.5km study area.

#### Substation/s

#### Operation (Year 1)

The foreground of the view comprises a mixed species hedgerows framing an arable field that slopes towards the west. There is a wide grass verge to the front of the hedgerow that borders the parking area. The presence of the hedgerow breaks up the middle ground of view leaving the distant horizon as the main feature. The foreground is also framed by deciduous trees to each side and the parking spaces are also placed within intermittent tree cover such that views towards the rear of the viewpoint are more filtered than those to the front (west part). In the far distance the landscape forms a flat, low-lying presence where deciduous woodlands such as North Carlton Covert and Scampton Gorse stand out in contrast to the open arable fields. The view mainly highlights the productive arable landscape with large fields and contrasting woodlands visible amongst hedgerows and hedgerow trees. The hedgerows add to the overall wooded context of the landscape due to the elevation of the view. To the right-hand side of the view, the tall hedgerow bordering the parking area close down views in that direction and likewise to the left of the view. The remainder of the horizon is made up of large skies with few vertical features other than the power industry of the River Trent floodplain in the far distance.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A strong belt of scattered trees is proposed to the east of field B1, providing a solid feature in this somewhat exposed landscape. This buffer of riparian vegetation adjacent to the watercourse will add height and structure to the landscape and enhance this natural ditchline. This will also help to mitigate views from the north on Kexby Road.

A block of scattered trees is also proposed to the northern boundary of field A3 adjacent to a field of bird mitigation to the south. This will provide a strong block of trees which will flow into the views of Fillingham Low Wood when viewed from the north on Kexby Road.

#### Shelterbelt

Shelterbelt planting the north of North Farm will further enhance the woodland cover in this area and help to mitigate views to the south.

#### Existing hedges

Existing hedges to the north of fields B2, B3 and B4 are low cut and would benefit from enhancement to ensure that the Scheme is screened from this view, although the land falls away to the west and predominantly obscures views, even with low cut hedges, there are views of the ground level in some places. Hedgerow trees will enhance the view from this road.

The eastern boundary of field B4 will also be enhanced, and existing hedges will be allowed to grow out. The addition of irregularly spaced

#### **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, views southwest towards the Site will be screened in the close-mid-range through the enhancement of existing low hedges which will be managed to a height of 5m. The addition of hedgerow trees will further mitigate views. In the middle distance, new and augmented hedgerows will provide a series of good quality hedgerows both formally strengthening the existing and historical field pattern and creating a multi-layered landscape. Views of the longer distance, where hedgerows do not block these, will be of a layered, well treed landscape with a backdrop of wooded vegetation in places on the horizon. Both new and existing vegetation will have established and begun to mature creating a strong structure to the landscape and reducing the exposed feel of the area whilst retaining its overall open character. This exposed area will appear less vast in places, whilst open views across the valley will also be retained.

Mid-distance views towards the Site of Cottam 1 North and south with the Cottam 2 Site to the northwest with slightly undulating landscape down to the valley with intervening field boundaries visible. The viewpoint sits on an exposed area with long distance views to the west with shorter views east

**Overall**, in terms of mitigation for the Cottam 1 Site/Sites, due to the limited network of public rights of way (PRoW) across the area the aim is to enhance the river corridors and their flood plains for their recreational importance and the Trent is the main river providing a valuable link. The Trent Valley Way in particular, provides a long-distance route. The other notable river is the upper parts of the Witham of which the River Till is a tributary. The aims are to extend the non-road network, especially where it can link people to woodlands and river corridors. Trees and hedgerows make an important contribution and improvements on approaches to villages could improve the identity of the local landscape for the benefit of recreation.

Suggestion to add screening hedge to the field in immediate view to break up impacts that the proposed panels might have on the skyline. Reinforce this hedgerow with trees to mitigate views from riders using The lack of hedgerows along these roads form an important element in allowing open views across the area, especially where the landform is slightly elevated.

#### Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain longterm improvements in biodiversity in the local area, all of which will benefit visual receptors.



	This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 1.	hedgerow trees will help to soften this rather exposed landscape and create a more varied scene where this location is rather devoid of height. The inclusion of trees will also add height to boundaries helping to mitigate potential views by horse riders.  New hedges  A new hedge is proposed to the south of fields B2 and B3, mitigating views from the north and providing further screening to the remainder of the Cottam North Site. The addition of hedgerow trees will enhance the character  locally and help to strengthen the historical field pattern locally.  Further west, a new hedge with hedgerow trees is proposed to the eastern boundary of fields A1 and A4, mitigating any views from the northeast of this block of panels and those further southwest.  Grassland mixes  Two 10m belts of tall herb mix are proposed around the existing ditches that run north/south through fields B1 and B3/4. This provides a buffer to the watercourses and creates added mosaic of vegetation where no hedge exists.  Flower rich pollinator mixes are used around the existing track, around all field margins in this area as well as a large block in field B1 creating a strong visual base layer and ecological benefits within the surrounding agricultural landscape.  Adverse effects:  Panels and structures across the landscape  Increased hard standing areas  Increased traffic locally  Some minor light pollution within open countryside  Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:  - Grassland reversion around field boundaries and PRoW - Increased woodland/vegetation cover - A more varied landscape - Improved (more natural) management of exiting vegetation - Less expanse of intensively managed arable land - A less exposed and windswept landscape - Water quality improvements - Potential animal grazing - Reinstatement of historic field patterns - Bird mitigation fields - Significantly improved biodiversity  Growth of existing and proposed vegetation is assumed to be:  Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.	
Magnitude	Very Low	Very Low	Low	Very Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible Not Significant	Minor Not Significant	Negligible <b>Not Significant</b>



Viewpoint VF	point VP41 – Gltw/85/1 just off Kexby Road		
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary The Cumulative Effects upon viewpoint 41 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor.  Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]	
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.	
		Overall Landscape Character and Visual Amenity	
		Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features.  Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.	
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low	
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term	
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Negligible Not Significant	



#### Viewpoint VP44 - Junction off School Lane and Chapel Lane

#### **Viewpoint Baseline:**

The view is located at the junction with School Lane and Chapel Lane, looking north towards the southern extent of the Cottam 2 Site and south towards the Cottam 1 North Site

<u>Objective:</u> This viewpoint offers views of a flat, low-lying landscape within the context of a broad valley that is quite conspicuous at this location due to the open nature of the landscape. The land use is predominantly arable with only a few blocks of woodland comprising small conifer plantations and shelterbelts. In terms of man-made features, there are residential buildings fronting Chapel Lane to the south (right of view) and School Lane to the north (left of view).

<u>Subjective:</u> The viewpoint depicts a large-scale, open landscape, being exposed due to lack of woodlands and tree cover. The hedgerows are dense and tall with few gaps and grass verges are a feature of the road network. In terms of variety, the combination of features includes residential dwellings at the edge of Springthorpe and the minor road network that is lined by grass verges and strong hedgerows with very few detractors other than the intensive arable land use that erodes the open character of the landscape. In terms of texture, this is a highly managed landscape with mown grass verges, trimmed hedgerows and domestic influences such as sheds and outbuildings. The colours are mixed and somewhat muted with the road network being the most prominent feature giving the impression of an invigorating landscape and bland setting to the settlement.

<u>Overall:</u> The local road network is the most prominent feature that runs east west and connects the settlement of Springthorpe Grange. The view has a calm nature owing to the low levels of passing traffic. The immediate view is typical of the local landscape character and the close proximity of Springthorpe provides 'sense of place' and belonging. The overall experience is but pleasant, but lacking vigour.

#### **Receptors:**

This viewpoint is representative of views available to users of Chapel Lane and School Lane. This section of road is used by walkers, horse riders, motorists, and residents. There are no meaningful views towards the Site/Sites due to distance and intervening hedgerows.

#### **Description of View:**

The foreground of the view comprises of views to School Lane at junction with Church Road with views to the northeast towards Cottam 2 Site through gap in the hedgerow. There is a wide grass verge that borders school lane with hedgerows to either side of the road. The foreground of the view is open and dominated by flat arable fields bordered with strong hedgerows. To the middle and background of the view, unnamed woodlands to the northeast of Springthorpe stand out in the view and stand tall in the horizon alongside built form associated with Corringham Grange Farm to the far distance. The Corringham windmill is also visible in the distance. To the left of view facing west, settlement of Springthorpe is prominent in the view. To the right of view facing east, School Lane and the Rectory stand out in the view. Telegraph poles can be seen throughout the view.





Receptor susceptibility to change	Value of view	Sensitivity	Embedded Mitigation
In terms of forces for change for VP44, aims are to protect existing rural landscape features, in particular the restoration of hedgerows since the most widespread change has been in agricultural intensification and the change from pastoral to arable cropping that has resulted in the loss of hedges, and consequently, an increase in field size. The loss of pasture is particularly evident around settlements, where grazing animals and smaller field sizes contribute to the setting and structure of several villages. Many of the rural villages have not seen widespread expansion but development pressures continue with the demand for housing, commerce and industry creating visual intrusion and extending the urban fringe.  Overall, the susceptibility for VP44 is conditioned by the flat, open landscape and whilst the aim is to plan new tree planting around key settlements, woodland does not form a significant component of this landscape, and in considering its open and expansive character, extensive new woodland planting would be generally inappropriate. However, there is significant benefit with appropriate tree planting that could be used in and around settlements to increase the occurrence of seminatural habitats and maintain the perception of a 'well-treed' landscape. The relevant characteristics of the landscape therefore have a moderate ability to accommodate change without undue adverse effects.	Scenic: The location offers some interesting features locally, but with more invigorating views out towards the surrounding landscape, which is large scale and exposed.  Cultural: The view features the Grade II listed Corringham Windmill (List Entry: 1359417) that is a tower mill or early C19 in red brick to the north. To the west, there is the Grade I listed Church of St Lawrence and George (List Entry: 1146616).  Natural: To the north, the land falls towards the watercourses of Corringham Beck and Aisby Beck and to the south towards the minor tributaries of the River Till, which is are important features.  Recreation and Enjoyment: The local road network provides access for recreation; however, the mown grass verges detract from the natural character of the area.  Local Distinctiveness and Sense of Place: The presence of the east west road network creates a local distinctiveness, but the 'sense of place' is diminished where these networks are busy such as the A631. There is also a strong north south road network, which enhances the grain of the landscape.  Health and Wellbeing: The natural character of the hedgerows and small woodland copses enhance a strong feeling of health and wellbeing, but the busy road network detracts from this.  Important Spatial Function: This slightly undulating, low-lying landscape within the wider context of a broad vale where the road network plays a significant influence.  Overall, the value of VP44 is shaped by the agricultural activity that has modified landscape. However, the woodlands and hedgerows provide some structure to the otherwise flat, low-lying landform. The natural character of the local road network is also a key feature. Springthorpe supports a minor road network that is lined by grass verges and strong hedgerows with very few detractors other than the intensive arable land use.	Range of Features: This location comprises a local settlement. This is a part open location where the tall hedgerows and built form add some structure to the view and help close down visibility. The hedgerows, the distant woodland cover and the scattered farmsteads are evident but otherwise there is a limited range of features in the view.  Importance of View: This is an open location at the edge of a small settlement where a local lane that plays a part in connecting settlements and for informal recreation, which slightly raises the level of importance of the view. The view has a limited combination of features and the absence of hedgerows along this section of the road allow open visibility across the area.  Number of Receptors: This is the local road network that almost connects the settlement of Springhtorpe to the A631 (Harpswell Lane). This route is likely to appeal to local users than those from a wider area. The strategic major road network is defined by important historic routes (north south) and the strategic minor road network also links several historic and distinctive smaller string of settlements (east west) across the area. This local road network enhances these connections for recreation and access in the wider context of the Till Vale.	Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:  Panels to be set a minimum of 15m from adjacent PRoW.  Panels to be set a minimum of 50m from adjacent residential property boundaries.  Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.  Panels to be set a minimum of 3m from Site boundaries.  Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.  Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.  The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.
Medium to Low	Medium	Medium	Not Applicable





#### Viewpoint VP44 - Junction off School Lane and Chapel Lane

#### **Construction Magnitude of Change**

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be screened due to the presence of foreground hedgerow and distance. During the latter part of the construction stage, views would become available, but the distance would provide screening such that these activities

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

would be confined to a narrow section of the

These short-lived construction activities would obstruct a small portion of the view and not become a dominant feature. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact and help with mitigation. There would not be a fundamental change to the surroundings to the north, south and east and west of this location.

#### Construction Access

The viewpoint will not be affected by construction traffic due to the distance between the viewpoint and the proposed construction access.

#### **Cable Route Corridor**

Viewpoint is outside of the 0.5km study area.

Substation/s

#### **Operation Magnitude of Change (Year 1)**

The foreground of the view comprises a mixed species hedgerows framing an arable field that slopes towards the west. There is a wide grass verge to the front of the hedgerow that borders the parking area. The presence of the hedgerow breaks up the middle ground of view leaving the distant horizon as the main feature. The foreground is also framed by deciduous trees to each side and the parking spaces are also placed within intermittent tree cover such that views towards the rear of the viewpoint are more filtered than those to the front (west part). In the far distance the landscape forms a flat, low-lying presence where deciduous woodlands such as North Carlton Covert and Scampton Gorse stand out in contrast to the open arable fields. The view mainly highlights the productive arable landscape with large fields and contrasting woodlands visible amongst hedgerows and hedgerow trees. The hedgerows add to the overall wooded context of the landscape due to the elevation of the view. To the right-hand side of the view, the tall hedgerow bordering the parking area close down views in that direction and likewise to the left of the view. The remainder of the horizon is made up of large skies with few vertical features other than the power industry of the River Trent floodplain in the far distance.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A proposed scattered tree belt is proposed to the western boundary of D22 either side of the existing hedgerow screening views of the more western extents of the Site whilst mitigating views to the east from 'The Lodge'.

#### <u>Shelterbelt</u>

Longer distance views are to be mitigated by the proposed 5m shelterbelt planting adjacent to Thorpe Lane and existing roadside hedgerow.

#### Existing hedges

The existing riparian vegetation to the eastern boundary is to be retained, mitigating views from further east of the Site.

Existing hedgerows surrounding fields D21 and D22 and to the north of field D1 9are to be enhanced with

# Mitigation (Operation Magnitude of Change at Year 15)

Secondary mitigation such as planting, and grass seeding would be taken into account at this stage to include the following changes to the landscape:

Views are distant and obscured by intervening vegetation, however augmented hedgerow boundaries on the southern extents of the Cottam 2 Site with hedgerow trees added will help to create a multi layered landscape in the distance whilst retaining the open views locally.

**Overall**, in terms of mitigation for the Cottam 2 Site, due to the limited network of public rights of way (PRoW) across the area the aim is to enhance the local road networks for their recreational importance. The aims are to extend the non-road network, especially where it can link people to woodlands and river corridors. Trees and hedgerows make an important contribution and improvements on approaches to villages could improve the identity of the local landscape for the benefit of recreation.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

# **Decommissioning Magnitude** of Change

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.



	This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 2.	the addition of irregularly spaced hedgerow trees and infilled as necessary to create a layered well-treed landscape and further strengthening the existing field pattern in this area and creating some additional height across the local views.  New hedges The relatively small-scale field pattern in this area, broken up by existing ditches does not require additional hedge planting.  Grassland mixes Adjacent to existing hedgerows and proposed blocks of scattered trees, a tussock grass mix is proposed with a wildflower grass mix under the proposed panels. Areas of flower rich pollinator mix are proposed around other field boundaries as well as a 10m buffer around existing overhead power lines within field D18 and beyond.  Adverse effects:  Panels and structures across the landscape Increased hard standing areas Increased traffic locally Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure structures visible above existing vegetation		
Magnitude	Very Low	Very Low	Low	Very Low
Level of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor <b>Not Significant</b>	Negligible Not Significant



	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing	In Summary The Cumulative Effects upon viewpoint 44 of the Cumulative Developments is Minor at year 1 of operation and Minor at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor.
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.2 [C6.4.8.15.2.2] which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character of the Unwooded Vales  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. I contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam 1 Site/Site would not alter the overall character of the landscape within the Unwooded Vales Character Area.
Magnitude	No Change	Construction: Low Operation (Year 1): Low Operation (Year 1) with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	No Change	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1) with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant





Viewpoint VP45 - A361

#### **Viewpoint Baseline:**

The view is located at the junction with the A361 (Harpswell Lane) and Templefield Road, looking northwest towards the southern extent of the Cottam 2 Site and south towards the Cottam 1 North Site.

<u>Objective:</u> This viewpoint offers views of a gently undulating landscape within the context of a broader rolling valley that is conspicuous at this location. The land use is predominantly arable with deciduous woodland visible on the horizon to the north. These are a variety of woodland blocks that comprise of small woodlands around the settlement of Yawthorpe and the broadly triangular plantation at Yawthorpe Fox Covert. In terms of man-made elements, there are residential dwellings at Moorlands Magin Moor to the west (left of view), otherwise the immediate area is sparsely settled comprising isolated dwellings and the small hamlet of Yawthorpe.

<u>Subjective:</u> The viewpoint depicts a large-scale, open landscape, being exposed due to the large field sizes and lack of hedgerows and tree cover. In terms of variety, the combination of features includes isolated dwellings, Yawthorpe Fox Covert, tree clumps, hedgerows and hedgerow trees, and the gently rising landform where Yawthorpe occupies higher ground. In terms of texture, this is an intensely managed landscape with an arable dominance and a combination of colours through crop variety.

Overall: The A361 is a prominent feature where foreground hedgerows provide some visual relief from the intensive arable fields. The immediate view is typical of local landscape character, but woodland at Yawthorpe Fox Covert and riparian trees lining Yawthorpe Beck add some vigour and interest to the view. The woodland around Yawthorpe also compliments the landscape setting of Home Farm on the horizon, which is an attractive feature. The overall experience provides a balanced landscape with some distractions from the A361.

#### Receptors

This viewpoint is representative of views available to motorists using the A361 that leads from Corringham in the west to Hemswell in the east. There are no meaningful views towards the Site/Sites due to distance, topography, and intervening hedgerows.

#### **Description of View:**

The foreground of the view comprises of junction of local unnamed road and A631 where there is a gap in the hedgerow of unnamed road looking northwest towards Cottam 2 Site. There is a wide grass verge to the either side of the local road and A631. The foreground offers clear views due to the gap in the hedgerow. The vast majority of the foreground and middle ground comprises of productive arable landscape that is bordered by strong hedgerow on all sides. To the distance of the view, built form and trees associated with Magin Mooor Cottages can be seen to the west. To the north woodland to the southwest of Yawthorpe and the settlement of Yawthorpe stands out in the horizon. Vegetation surrounding Yawthorpe Beck stands out in the middle ground as it cuts across the arable field to the north. To the left of view the A631 stand out in the landscape and contrasts heavily with the surrounding hedgerows and arable fields. To the right of the view the unnamed local stand out with clear views to the east due to the lack of hedgerows. Telegraph poles stand tall in the foreground of the view.





In terms of forces for change for VP45, there are aims to promote some new woodland planting as this is a component of the landscape. The aim should be to also protect the distinctive character of the settlements and consider the visual impact of any new development. The restoration of hedgerows should also be given priority to strengthen the field pattern and enhance linkages between woodlands. The impact on the setting of village churches is also particularly important as these are distinctive local landmarks. There are regular patterns of enclosure and modern arable fields where hedgerows have been removed, but due to the abundance of large woodland blocks this helps reinforce a sense of enclosure.

**Overall,** the susceptibility for VP45 is conditioned by the agricultural intensification and farm amalgamation that is resulting in the loss or damage of many typical landscape features, including traditional patterns of field boundaries, remnants of ridge and furrow, and grasslands. The loss of grazing fields around the edges of villages that is leading to a more homogenous landscape.

Low

#### Value of view

<u>Scenic:</u> The small settlements such as Yawthorpe have distinctive landscape elements which contribute to the special identity of the surrounding landscape. This includes their approaches and well-integrated wooded edges and views towards these settlements from the outlying landscape.

<u>Cultural</u>: These are a variety of woodland blocks including the small copses to the northeast of the settlement of Yawthorpe and around Willhoughton Grange. The nearest listed buildings are within the settlement of Corringham, including the Grade I listed Church of St Lawrence (List Entry: 1064162). The Grade II listed Corringham Windmill stands just to the north of Corringham Road.

<u>Natural:</u> The landscape feels exposed in parts, but the combination of the blocks of woodlands such as Yawthorpe Covert and mature hedgerow trees provide a strong sense of enclosure and structure within the landscape. The woodlands within this landscape pattern are important as natural features.

<u>Recreation and Enjoyment:</u> This landscape setting to the settlement of Yawthorpe is important as an invigorating backdrop for recreation and enjoyment, particularly for those travelling along the A631 to the south.

<u>Local Distinctiveness and Sense of Place:</u> Roads and minor farm tracks are features of this landscape where hedgerows are absent, and views are expansive. This attribute contributes to local distinctiveness and 'sense of place'.

<u>Health and Wellbeing:</u> The tranquility associated with the minor tracks that lead to these small settlements such as Yawthorpe is important for health and well-being.

<u>Important Spatial Function:</u> These local roads can offer long westward views to the power stations on the River Trent, and eastward views to the scarp face of Lincoln 'Cliff', particularly along the A631.

**Overall**, the value of Viewpoint VP45 is shaped by the limited network of footpaths and bridleways giving rise to the importance of these local lanes and farm tracks for recreation. The sequence of views across the area towards woodlands and tree cover within the hedgerows that form the approaches to settlements are locally important features.

Medium to Low

#### Sensitivity

Range of Features: This location comprises the junction of the local road network with the strategic east west road connections between Gainsborough and Market Rasen. This is an open location where the tall hedgerows add some structure to the view, but the busy road network is a key detractor. The hedgerows, the distant woodland cover and the scattered farmsteads are evident but otherwise there is a limited range of features in the view.

Importance of View: This is an open location at the junction of a local and major road, which dilutes the level of importance of the view. The view also has a limited combination of features and the low-cut hedgerows along this section of the road allow open visibility across the area.

Number of Receptors: This is the strategic road network that connects the settlements of Gainsborough and Market Rasen. This route is likely to appeal to both local users and those from a wider area.

#### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Medium to Low Not Applicable





#### Viewpoint VP45 - A361

# Activities considered includes, site preparation

/ enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be screened due to the presence of foreground hedgerow and distance. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the distance would curtail visibility such that these activities would be confined to a narrow section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a small proportion of the view and not become a dominant feature. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact and assist with mitigation. There would not be a fundamental change to the surroundings to the north, south and east of this location.

#### **Construction Access**

Viewpoint will not be affected by construction traffic due to the distance between the viewpoint and the proposed construction access.

#### **Cable Route Corridor**

Viewpoint is outside of the 0.5km study area.

#### Substation/s

#### Operation (Year 1)

The foreground of the view comprising a mixed species hedgerows framing an arable field would not change. The presence of the hedgerow breaks up the middle ground of view leaving the distant horizon as the main feature, and this would help obscure the presence of the panels. In the far distance the landscape forms an area of higher ground where deciduous woodlands at Yawthorpe stands out in contrast to the open arable fields and this would remain as a feature. The woodlands add to the overall wooded context of the landscape due to the elevation of the view and this would not change.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A scattered tree belt is proposed to the eastern extents of the Cottam 2 Site adjacent to the Yawthorpe Beck which will provide additional tree cover beyond intervening hedgerows and scattered trees

#### Scattered tree belt

A proposed scattered tree belt is proposed to the western boundary of D22 either side of the existing hedgerow screening views of the more western extents of the Site whilst mitigating views to the east from 'The Lodge'.

#### <u>Shelterbelt</u>

Longer distance views are to be mitigated by the proposed 5m shelterbelt planting adjacent to Thorpe Lane and existing roadside hedgerow.

#### Existing hedges

The existing riparian vegetation to the eastern boundary is to be retained, mitigating views from further east of the Site.

Existing hedgerows surrounding fields D21 and D22 and to the north of field D1 9are to be enhanced with the addition of irregularly spaced hedgerow trees and infilled as necessary to create a layered well-treed landscape and further strengthening the existing field pattern in this area and creating some additional height across the local views.

#### <u>New hedges</u>

The relatively small-scale field pattern in this area, broken up by existing ditches does not require additional hedge planting.

#### **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

By Year 15, these scattered trees will have established but will not be fully mature and will only be partially visible (if at all) beyond intervening vegetation in the mid-long distance. The long-distance views will remain with some blocks of woodland on the horizon.

The aim should be to plan new woodland in the most suitable locations. This may include in and around settlements, where woodland would help integrate new development into the landscape and in more intimate low-lying areas, where woodland would help create a mixed pattern of land use. Consideration should also be given to the management of existing trees and woodland, enhancing biodiversity value and age structure through new planting and the creation of woodland edge habitats. An increase in grassland reversion should also be encouraged, increasing the occurrence of semi-natural habitats.

**Overall**, in terms of mitigation for the Cottam 1 Site/Sites, due to the limited network of public rights of way (PRoW) across the area the aim is to enhance the local road networks for their recreational importance The aims are to extend the non-road network, especially where it can link people to woodlands and river corridors. Trees and hedgerows make an important contribution and improvements on approaches to villages could improve the identity of the local landscape for the benefit of recreation.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PPOW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

#### Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.



	This viewpoint is within the 2km study area		Growth of existing and proposed vegetation is assumed to	
	but there would be no view of the Substation	Grassland mixes	be:	
	at Cottam 2.	Adjacent to existing hedgerows and proposed blocks		
		of scattered trees, a tussock grass mix is proposed	Woodland/trees and shelterbelts: 2.5m max at Year 1,	
		with a wildflower grass mix under the proposed	7.5m max at Year 15.	
		panels. Areas of flower rich pollinator mix are		
		proposed around other field boundaries as well as a	New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.	
		10m buffer around existing overhead power lines		
		within field D18 and beyond.	Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.	
		Adverse effects:	Shrubs: 0.9m at Year 1 and 5m at Year 15.	
		<ul> <li>Panels and structures across the landscape</li> </ul>		
		<ul> <li>Increased hard standing areas</li> </ul>		
		Increased traffic locally		
		Some minor light pollution within open		
		countryside		
		Substation, Battery storage and other		
		associated infrastructure structures visible		
		above existing vegetation		
B.A. a. a. a. Character		l v ·		V 1
Magnitude	Very Low	Very Low	Low	Very Low
Level of	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Effect	Adverse & Short Term	Adverse & Long Term	Berieficial & Long Term	Neutral & Short Term
Significance	No. 11 de la constante de la c	N. Italian et att	Minor Not Significant	No. 10 of the second se
of Effect	Negligible <b>Not Significant</b>	Negligible Not Significant		Negligible Not Significant



Viewpoint VF	oint VP45 - A361			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary The Viewpoint is located within the northern extent of Tillbridge and therefore Cumulative visual effects are anticipated however the views of the closets Site Cottam 2 from this location are considered negligible therefore the cumulative visual effects are considered to be Minor. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor.		
	there no meeting matter visual enects are underpared.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.		
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.2 [C6.4.8.15.2.2] which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]		
		Overall Landscape Character of the Unwooded Vales  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area.		
Magnitude	No Change	Construction: Low Operation (Year 1): Low Operation (Year 1) with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1) with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant		



#### **Viewpoint VP46 - Corringham Windmill**

#### **Viewpoint Baseline:**

The view is located on the A631 at the field entrance to Corringham Windmill, looking north towards the Cottam 2 Site and south towards the Cottam 1 North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a slightly undulating, low-lying landscape within the wider context of a broad vale, which is conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop. There are some local variations in landform where the land rises to the west (left of view) just beyond Corringham to form a narrow spur known as Windy Ridge (at Mill Farm Windmill). To the north, the land falls towards the watercourses of Corringham Beck and Aisby Beck and to the south there is a local plateau that extends across the A631 towards the Sewage Works on Springthorpe Road. The landform also rises towards the east (right of view) towards the small settlement of Yawthorpe Fox Covert (rising from 18m AOD to 25m AOD). In terms of enclosure, there are very few woodland blocks or shelterbelts in the wider landscape other than Yawthorpe Fox Covert to the east and Wharton Wood towards the west. At closer proximity, there are no woodland blocks and low-cut hedgerows and as a result there are mainly open views, apart from to the west where the settlement of Corringham closes down the visibility. In terms of man-made features, there is only Corringham Grange Farm and The Cottage within the central part of the Site/Sites (outside the RLB), otherwise the settlement is centered on Aisby to the north, Springthorpe to the south, Corringham to the west and Yawthorpe to the east. The A631 is a prominent feature particularly given its long, straight alignment and fast-moving traffic.

<u>Subjective:</u> The viewpoint depicts a large-scale, exposed landscape. In terms of variety, the hedgerows are well cut back with few hedgerow trees. There are narrow grass verges that present a simple consistency to the A631. In terms of texture and colour, the hedgerows are low cut and have a highly managed appearance so there is little texture and muted, calm tones due to the simplicity of the landscape and general absence of features. Shelterbelt vegetation (Poplar) and woodland cover at Hall Farm and Old Hall is evident on the horizon, which adds some interest to the view. Mast poles and electricity pylons are prominent. The views are vast but tend to be ordinary and almost bland in the immediate context of the Site/Sites, whereas the distant horizon reveals the Limestone Scarps and Dipslopes Character Area 6a in the east comprising woodland cover at Willhoughton and Hemswell.

Overall: The view is influenced by the presence of the A631, which is a detractor. The location offers some interesting features locally, but with more invigorating views out towards the surrounding landscape, which is large scale and exposed. The tree cover is limited, the hedgerows are cut back, and the arable land use is intensively managed, but the presence of far-reaching views adds some stimulus. The overall experience is that of an ordinary location with an unsettled feeling due to the lack of enclosure and intimacy, and the busy road. There are however interesting and pleasant distant views that provide a more balanced context due to the woodlands on the horizon. The windmill adds a sense of consistency to the view, but the building is not seen in context with other windmills such as Mill Farm to the west of Corringham and Hewitt's Windmill at Heapham.

#### **Receptors:**

This viewpoint is representative of views available to pedestrian and vehicle users of the A631, and those visiting to appreciate the presence of the windmill.

#### **Description of View:**

The foreground of the view is set at a gap in the hedgerow along the A631, looking northeast. There is a wide grass verge to the front of the hedgerows on either side of the road. The hedgerows are low-cut, offering extensive views to the north (left of view) and south (right of view) across open, arable fields. In the arable field adjacent to the A631, Corringham Windmill stands as a prominent feature. To the left of view (facing north), the view is cut short by field hedgerows but in the far distance the roofscape of Corringham Grange Farm can just be viewed. The views to the northeast, beyond the windmill, are open and flat and the landscape is only broken up in the far distance by strong hedgerows and shelterbelts. Views to the southeast and south (right of view), remain open. This section of the view is broken up by the foreground hedgerow but the distant woodlands to the east of Sturgate Airfield are just silhouettes in the horizon.





In terms of forces for change for VP46, there are aims to protect existing rural landscape features, in particular the restoration of hedgerows since the most widespread change has been in agricultural intensification and the change from pastoral to arable cropping that has resulted in the loss of hedges, and consequently, an increase in field size. The loss of pasture is particularly evident around settlements, where grazing animals and smaller field sizes contribute to the setting and structure of several villages.

Overall, the susceptibility for VP46 is conditioned by the flat, open landscape and whilst the aim is to plan new tree planting around key settlements, woodland does not form a significant component of this landscape, and in considering its open and expansive character, extensive new woodland planting would be generally inappropriate. However, there is significant benefit with appropriate tree planting that could be used in and around settlements to increase the occurrence of seminatural habitats and maintain the perception of a 'well-treed' landscape. The relevant characteristics of the landscape therefore have a moderate ability to accommodate change without undue adverse effects.

Medium

#### Value of view

Medium

<u>Scenic:</u> The location offers some interesting features locally, but with more invigorating views out towards the surrounding landscape, which is large scale and exposed.

<u>Cultural:</u> The view features the Grade II listed Corringham Windmill (List Entry: 1359417) that is a tower mill or early C19 in red brick.

<u>Natural:</u> Because of the fertilizer inputs, the main surviving areas of semi-natural habitat tend to be limited. To the north, the land falls towards the watercourses of Corringham Beck and Aisby Beck, which is an important feature.

<u>Recreation and Enjoyment:</u> The local road network provides access for recreation; however, the mown grass verges detract from the natural character of the area.

<u>Local Distinctiveness and Sense of Place:</u> The presence of the east west road network creates a local distinctiveness, but the 'sense of place' is diminished where these networks are busy such as the A631.

<u>Health and Wellbeing:</u> The natural character of the hedgerows and small woodland copses enhance a strong feeling of health and wellbeing, but the busy road network detracts from this.

<u>Important Spatial Function:</u> This slightly undulating, low-lying landscape within the wider context of a broad vale where the road network plays a significant influence.

**Overall**, the value of VP46 is shaped by the agricultural activity that has modified landscape. However, the woodlands and hedgerows provide some structure to the otherwise flat, low-lying landform. The natural character of the local road network is also a key feature, but the major route network is a major constraint in terms of building on the character of the area.

#### Sensitivity

Range of Features: This location comprises the strategic road network with east west connections between Gainsborough and Market Rasen. This is an open location where the low-cut hedgerows allow open views across the area. The busy road network is a key detractor. The hedgerows, the distant woodland cover and the scattered farmsteads are evident but otherwise there is a limited range of features in the view other than the Grade II listed Corringham Windmill (List Entry: 1359417) that is a tower mill or early C19 in red brick.

Importance of View: This is an open location on the major road network, which dilutes the level of importance of the view. The view also has a limited combination of features and the low-cut hedgerows along this section of the road allow open visibility across the area. The Grade II listed Corringham Windmill is the key feature.

<u>Number of Receptors</u>: This is the strategic road network that connects the settlements of Gainsborough and Market Rasen. This route is likely to appeal to both local users and those from a wider area and the listed windmill may attract some visitor interest.

Medium

#### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Not Applicable





#### **Viewpoint VP46 - Corringham Windmill**

#### Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be screened due to the presence of foreground hedgerows. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerows, but the distance and the intervening vegetation would confine the works to a narrow section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a small portion of the view and not become a dominant feature. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact and assist with mitigation. There would not be a fundamental change to the surroundings to the south of this location.

#### **Construction Access**

The viewpoint will not be affected by construction traffic due to the distance between the viewpoint and the proposed construction access.

#### **Cable Route Corridor**

Viewpoint is within 0.5km study area and will experience effects at construction stage.

#### Substation/s

This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 2 due to the distance and intervening vegetation.

#### **Operation (Year 1)**

The foreground of the view would not change. The hedgerows are low-cut, offering extensive views to the north (left of view) and this would remain as open arable fields. The Corringham Windmill would also remain as a prominent feature and would not be affected by the presence of the panels beyond. In the far distance the roofscape of Corringham Grange Farm can just be viewed and thepanel areas would be set in context with this building but would hardly be visible due to the intervening layering of the hedgerows The views to the northeast, beyond the windmill, are open and flat and the landscape is only broken up in the far distance by strong hedgerows and shelterbelts and this would not change.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### **Shelterbelt**

A block of shelterbelt planting is prosed around an existing small block of vegetation to the east of field H5, creating an appropriate block of woodland within the open landscape, creating visual height and interest.

Shelterbelt planting to the western and southern boundaries of fields H1 and H2 will both increase the height and vegetated cover locally and better define the historic field pattern whilst helping to screen views of the Site from the south and west.

#### **Existing hedges**

The southern boundary hedges to fields H2 and H5 are to be enhanced to mitigate views into the Site from the A631 Corringham Road and helping to enhance the setting of Corringham Mill in the foreground.

#### New hedges

A new hedgerow, with hedgerow trees to the south, west and east of Corringham Grange Farm will augment the existing vegetation in the area, define the boundary of the dwelling/farm and provide a strong buffer to the panelled areas adjacent to the farm and The Cottage beyond.

#### **Grassland mixes**

A 50m buffer is to be provided to the South of Corringham Grange Farm, seeded with flower rich pollinator mix to create a pleasant setting to the dwelling as well as a buffer to the proposed Scheme. Elsewhere, the flower rich pollinator mix is to be used under existing overhead cables, between Corringham Grange and The Cottage and to the south and west facing hedgerow boundaries adjacent to both new and existing vegetation.

#### Adverse effects:

Panels and structures across the landscape Increased hard standing areas Increased traffic locally

Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure structures visible above existing vegetation

#### **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

By Year 15, existing and proposed vegetation will have established and begun to mature, creating strong field boundary delineation, addition height across the landscape and strong buffers to the proposed development. Close-range views will be of the windmill within a stronger backdrop of vegetation whilst mid-range views will be of a well treed landscape beyond the open and exposed area adjacent to Corringham Road. New vegetation will have integrated into the existing landscape around Corringham Grange Farm to create a layered landscape with occasional long-distance views of a partially wooded horizon.

The aim should be to plan new woodland in the most suitable locations. This may include in and around settlements, where woodland would help integrate new development into the landscape and in more intimate low-lying areas, where woodland would help create a mixed pattern of land use. Consideration should also be given to the management of existing trees and woodland, enhancing biodiversity value and age structure through new planting and the creation of woodland edge habitats. An increase in grassland reversion should also be encouraged, increasing the occurrence of semi-natural habitats.

**Overall**, in terms of mitigation for the Cottam 2 Site, due to the limited network of public rights of way (PRoW) across the area the aim is to enhance the local road networks for their recreational importance The aims are to extend the non-road network, especially where it can link people to woodlands and river corridors. Trees and hedgerows make an important contribution and improvements on approaches to villages could improve the identity of the local landscape for the benefit of recreation.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation

#### Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.



Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.2.4: Viewpoint Analysis & Evaluation – Views Not Significant [Reference: EN010133/APP/C6.3.8.3.2.4.25] January 2023

		The residual effects at the Operational Phase at Year 15 without Mitigation equate to those effects at the beginning of Year 1 before secondary mitigation has been applied. The Effects set out below include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage.	<ul> <li>Less expanse of intensively managed arable land</li> <li>A less exposed and windswept landscape</li> <li>Water quality improvements</li> <li>Potential animal grazing</li> <li>Reinstatement of historic field patterns</li> <li>Bird mitigation fields</li> <li>Significantly improved biodiversity</li> <li>Growth of existing and proposed vegetation is assumed to be:</li> <li>Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.</li> <li>New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.</li> <li>Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.</li> <li>Shrubs: 0.9m at Year 1 and 5m at Year 15</li> </ul>	
Magnitude	Very Low	Low	Low	Very Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Minor-Moderate Not Significant	Minor Not Significant	Negligible <b>Not Significant</b>



-	P46 - Corringham Windmill	Compulative Effects (Compulative Developments)
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary  The Viewpoint is located within 200m of the northern extent of the cumulative solar development Tillbridge Solar and therefore Cumulative visual effects are anticipated however the views of the closets Site Cottam 2 from this location are considered minor therefore the cumulative visual effects are considered to be minor. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor.
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.2 [C6.4.8.15.2.2] which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character of the Unwooded Vales  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area.
Magnitude	No Change	Construction: Low Operation (Year 1): Low Operation (Year 1) with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	No Change	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1) with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant





#### **Viewpoint VP48 - East Lane**

#### **Viewpoint Baseline:**

The view is located on East Lane where it takes a right-angled turn onto an un-named road, looking east over the Cottam 2 Site, north towards the Cottam 3b Site and south towards the Cottam 1 North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a slightly undulating, low-lying landscape within the wider context of a broad vale, which is hardly conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop. There are some local variations in landform where the land rises to the west (left of view) just beyond Corringham to form a narrow spur known as Windy Ridge (Mill Farm Windmill). To the north, the land falls towards the watercourses of Corringham Beck and Aisby Beck and to the south there is a gentle rise towards the A631 and Springthorpe Road (Corringham Windmill). The landform also rises towards the east (centre of view) towards the small settlement of Yawthorpe and Yawthorpe Fox Covert (rising from 18m AOD to 25m AOD). In terms of enclosure, there are very few woodland blocks or shelterbelts in the wider landscape other than Yawthorpe Fox Covert to the east and Wharton Wood towards the west. At closer proximity, there is vegetation at the edge of the settlement bordering East Lane which is mainly associated with Hall Farm and The Old Hall. There are also smaller woodland blocks, plantations and coverts around Home Farm, Ancliff Farm, Park Farm and Taskers Farm at Yawthorpe to the east. To the north and east there are mainly open views and to the west and south the settlement of Corringham (and associated vegetation) closes down the visibility. In terms of man-made features, there are new residential properties (left of view) at North close just off East Lane and properties to the south of East Lane. Otherwise, there is only Corringham Grange Farm and The Cottage within the central part of the Site/Sites (outside the RLB). Other settlement is centered on Aisby to the north, Springthorpe to the south, Corringham to the west and Yawthorpe to the east. East lane is a prominent feature particularly at the right-angled turn where it heads north towards Aisby.

<u>Subjective:</u> The viewpoint depicts the immediate edge of settlement in the wider context of a large-scale, exposed landscape. In terms of variety, the hedgerows are a strong feature, but well cut back with few hedgerow trees. The hedgerows are present on both sides of the lanes and there are narrow grass verges that presents a simple consistency and softer character overall. In terms of texture and colour, the hedgerows are low cut and have a highly managed appearance and little texture, but there is a colourful character due to the presence of the new residential properties at North Close. Mast poles are however prominent and in combination with the lane and new dwellings there is a notable man-made influence. The view tends to be ordinary overall, but the extended visibility in two directions (north south and east west) reveals a more open character, interest, and stimulus to this location.

<u>Overall:</u> The view is influenced by the presence of the new residential properties at North Close, which is a detractor to the rural character of the view. The location offers some interesting features locally, but with more interesting views out towards the north along the un-named road and east along East Lane. The tree cover is limited, the hedgerows are cut back, and the arable land use is intensively managed, but the presence of the arable landscape in the same context as the new residential properties adds some stimulus to the view. The overall experience is that of an ordinary location due to the lack of features and distant visibility.

#### Receptors

This viewpoint is representative of views available to walkers, horse riders, motorists and residents using these local lanes at the eastern edge of Corringham.

#### **Description of View:**

The foreground of the view is set at the junction of East Lane and Field Farm Lane that leads directly to Aisby. There is a wide grass verge to the front of the hedgerow on either side of East Lane. The hedgerow is low cut and well maintained and its presence therefore does not influence the views across the open arable fields towards the northeast. Field Farm Lane leads to Aisby and rises gradually with the landform. To the right of the view, East Lane extends further east as far as the access track that serves Corringham Grange Farm and The Cottage. The roofscape of Corringham is a notable feature out where the built form contrasts with vegetation at this edge of the settlement.



key consideration.

Medium



# In terms of forces for change for VP48, there are aims to protect the open and unsettled character of the landscape from inappropriate development and that tree planting around settlement fringes can help with integration and help contribute to the overall perception of a well treed landscape. The changes from flood risk and engineered solutions are also changing the landscape, but there is potential for landscape restoration projects to assist with mitigation of this change. The potential for river landscape to change is also a key consideration, but there is potential to introduce positive landscape interventions such as biodiversity and nature conservation initiatives. The impact on long distance views from surrounding towns and villages is also a

**Receptor susceptibility to change** 

**Overall,** the susceptibility for VP48 is conditioned by the impact of settlement on the edges of the river floodplain, the interventions associated with flood risk, the shifting of river channels, sand and gravel extraction and power and energy infrastructure. There are however also significant benefits to be gained from a range of landscape and biodiversity interventions such as restoration projects.

#### Value of view

Medium

<u>Scenic:</u> Despite the importance of nucleated settlements in this area, they are frequently hidden from view by tall hedgerows that border the local lanes. The setting of settlements of Corringham has a raw edge at this point on East Lane due to the new residential dwellings.

<u>Cultural:</u> The church spires and towers of the settlements form a prominent landmark on the skyline along with the large farmsteads. At this location, the woodlands and tree cover associated with The Old Hall and Hall Farm form part of the context of the view.

<u>Natural:</u> The quiet rural lanes provide opportunities for wildlife corridors across the area especially where they are associated with the waters course such as with East Lane and Corringham Beck.

<u>Recreation and Enjoyment:</u> This is a landscape of long views and some of the local lanes provide a quiet backwater from where to appreciate them. Some local lanes, such as East Lane, focus their views on short range features at the edge of settlements, which are also important to landscape character.

<u>Local Distinctiveness and Sense of Place:</u> Smaller settlements provide an important spatial function, where the land drains and minor roads show a marked change in the landscape. Where Corringham Beck forms a junction with East Lane this provides a 'sense of place'.

<u>Health and Wellbeing:</u> Recreation is provided by numerous small country lanes and there are few public rights of way (PRoW) which connect these lanes. Footpath (Corr/22/1) that passes to the west of Hall Farm and Old Hall provides scope for circular a route in conjunction with East Lane.

<u>Important Spatial Function:</u> Where the farmhouses are set back from the roads, they form a distinctive group of buildings and associated tree cover. This is particularly noticeable at Hall Farm and Old Hall.

**Overall**, the value of Viewpoint VP48 is shaped by the woodlands and tree cover associated with The Old Hall and Hall Farm form part of the context of the view. Some local lanes, such as East Lane, focus their views on short range features at the edge of settlements, which are also important to landscape character. Footpath (Corr/22/1) that passes to the west of Hall Farm and Old Hall provides scope for circular a route in conjunction with East Lane.

#### Sensitivity

Range of Features: This location comprises the junction of the local road network at the edge of a small settlement. This is an enclosed location where the tall hedgerows and built form limit views across the area. The hedgerows and woodland cover at Hall Farm and Old Hall are evident but otherwise there is a limited range of features in the view.

Importance of View: This is an enclosed location on the local road network at the edge of a small settlement, which dilutes the level of importance of the view. The view also has a limited combination of features and the tall hedgerows along this section of the road close down visibility across the area. The sequence of views across the area towards woodlands and tree cover within the hedgerows that form the approaches to settlements are however locally important features.

Number of Receptors: This is the local road network at the edge of a small settlement. This route is likely to appeal to local users and those from a wider area may be limited due to this being a small settlement and minor roads.

Medium

#### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Not Applicable





#### **Viewpoint VP48 - East Lane**

Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Thorpe Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the riparian vegetation bordering the River Till would provide some screening such that these activities would be confined to a narrower section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a significant proportion of the view and become a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and east of Thorpe Lane.

#### **Construction Access**

All throughout the construction stage the viewpoint will be affected due to East Lane leading towards the local track that connects to Cottam 2 Site at field H5. The vehicles going into the Site will not be visible due to the tall hedgerow on East Lane blocking views into the Scheme.

#### **Cable Route Corridor**

Viewpoint is outside of the 0.5km study area.

#### Substation/s

#### Operation (Year 1)

The foreground of the view as set at the junction of East Lane and Field Farm Lane would not change. There is a wide grass verge to the front of the hedgerow on either side of East Lane and this would remain as a feature of the view. The hedgerow is low cut and well maintained and its presence therefore does not influence the views across the open arable fields towards the northeast. To the right of the view, East Lane extends further east as far as the access track that serves Corringham Grange Farm and The Cottage and this would change to show the presence of panel areas to the north side of the lane. The roofscape of Corringham Grange Farm is visible just over the hedgerow to the northeast (right of view) and this would be lost and replaced by the presence of the panel areas rising above the existing hedgerows. To the left of view the eastern edge of the settlement of Corringham is a notable feature and this would not change.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A scattered tree belt is proposed to the northern boundary of field H1 adjacent to The Cottage reducing views southeast from the unnamed road near Corringham Beck. This belt will also provide additional height and structure to this area which is currently somewhat exposed to the east with low cut existing hedgerows.

A further strong belt of riparian species trees is proposed to the western boundary of Yawthorp Beck to the east of the Cottam 2 Site. Although this may not be visible from this viewpoint, being within the valley, the increased tree cover will enhance the character of the area locally and provide a strong buffer and ecological benefit to the beck along this stretch.

#### <u>Shelterbelt</u>

A 5m shelterbelt is proposed to the western boundary of the Cottam 2 Site, infilling where existing vegetation is missing. This will provide a strong boundary and defined field pattern, mitigate views and integrate existing disparate vegetation, creating height where the landscape is somewhat exposed in places.

A shelterbelt to the east of The Cottage and Corringham Grange Farm is proposed to mitigate views east from these properties into the panelled areas.

#### **Existing hedgerows**

Existing hedgerows to the entrance to The Cottage are to be enhanced, being allowed to grow out, with hedgerow trees added.

Further hedgerow enhancement is proposed to the northern, eastern and western boundaries of field H8, strengthening the field

#### **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

By Year 15, the close-mid range views will be enhanced by the addition of a 5m wide woodland buffer to the western boundary of the Site. Planting will have established and begun to mature and will help to screenSite/Sites. In the distance, the ridge beyond the valley will sit above proposed and existing planting creating a strong layered effect across the landscape with a predominantly wooded horizon where views exist.

This is a relatively close-range view of Cottam 2's western boundary.

**Overall,** in terms of mitigation for the Cottam 2 Site, due to the limited network of public rights of way (PRoW) across the area the aim is to enhance the local road network for their recreational importance. The aims are to extend the non-road network, especially where it can link people to woodlands and river corridors. Trees and hedgerows make an important contribution and improvements on approaches to villages could improve the identity of the local landscape for the benefit of recreation.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.

Shrubs: 0.9m at Year 1 and 5m at Year 15.

#### Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.



Significance of Effect	Minor <b>Not Significant</b>	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial Long Term	Neutral & Short Term
Magnitude	Low	Very Low	Very Low	Very Low
		New hedges New hedgerows with hedgerow trees are proposed around Corringham Grange Farm and The Cottage, mitigating views into the panelled areas and creating a strong buffer to the Scheme.  Turtle Dove mitigation  Grassland mixes A flower rich pollinator mix is proposed around the two properties with a meadow set out between the two and an area to the south of Corringham Grange Farm creating a 50 buffer to the panelled area.  Elsewhere, tussock mixes are to be provided to the boundaries of existing and proposed vegetation with the flower rich pollinator mix proposed to south and westerly facing vegetation as well as beneath existing overhead power lines as appropriate  Adverse effects:  Panels and structures across the landscape Increased hard standing areas Increased traffic locally Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure structures visible above existing vegetation The residual effects at the Operational Phase at Year 15 without Mitigation equate to those effects at the beginning of Year 1 before secondary mitigation has been applied. The Effects set out below include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage.		
	This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 2.	pattern and providing some added height and structure to these boundaries and further breaking up the blocks of panels.  Existing hedgerows are to be enhanced to the south of field H6 allowing this to grow out and be managed to a height of 5m.  Additional hedgerow trees are to be provided to create a strong field boundary adjoining an area of proposed planting around an existing panel.		



Viewpoint VF	Viewpoint VP48 – East Lane					
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]				
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint 48 of the Cumulative Developments is Minor at year 1 of operation and Minor at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.				
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.				
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.				
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.2</b> [C6.4.8.15.2.2] which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.				
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:				
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]				
		Overall Landscape Character of the Unwooded Vales  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area.				
Magnitude	No Change	Construction: Low Operation (Year 1): Low Operation (Year 1) with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low				
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term				
Significance of Effect	No Change	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1) with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Minor Not Significant				





#### **Viewpoint VP50 - Yawthorpe**

#### **Viewpoint Baseline:**

The view is located within the settlement of Yawthorpe, looking west towards the Cottam 2 Site and south towards the Cottam 1 North Site. The view is also looking northwest towards the Cottam 3b Site.

Objective: This viewpoint offers views of a gently undulating landscape within the context of a broader rolling valley that is conspicuous at this location due to the higher landform (approximately 20m to 25m AOD) at this junction. The land use is predominantly arable with the large deciduous woodlands of Yawthorpe Fox Covert in the immediate context of the view. These are a variety of other woodland blocks including the small copses to the northeast of the settlement of Yawthorpe around Willhoughton Grange. In terms of man-made elements, there are the farmstead and agricultural buildings within Yawthorpe, including Home Far, Ancliff Farm, Taskers Farm and Park Farm. There are also residential dwellings at Moorlands Magin Moor to the south, otherwise the immediate area is sparsely settled.

<u>Subjective:</u> The viewpoint depicts a large-scale, open landscape, being exposed due to the large field sizes and lack of hedgerows and tree cover. In terms of variety, the combination of features includes isolated dwellings, Yawthorpe Fox Covert, tree clumps, hedgerows and hedgerow trees, and the gently rising landform where Yawthorpe occupies higher ground and commands views over the landscape to the south. In terms of texture, this is an intensely managed landscape with an arable dominance and a combination of colours owing to crop variety and the various woodland blocks. The woodland on the distant horizon at Brown's Holt is also a feature in the view.

<u>Overall:</u> The background noise from the A361 is prominent, but the immediate view is typical of local landscape character being large scale and arable dominant. The woodland at Yawthorpe Fox Covert and riparian trees lining Yawthorpe Beck add some vigour and interest to the view. The woodland around Yawthorpe also compliments the landscape setting of Home Farm, which is an attractive feature. The overall experience provides a balanced landscape with some distractions from the A361, but the views are very pleasant and invigorating overall.

#### **Receptors:**

This viewpoint is representative of views available to walkers, horse riders, motorists, and residents within the settlement of Yawthorpe.

#### **Description of View:**

The foreground of the view is set in the context of a Yawthorpe Lane to the south of the settlement of Yawthorpe. To the west side of the route, there is a wide grass verge as frontage to the hedgerow. The hedgerow is low-cut, and its presence therefore does not influence the views across the open arable fields beyond. An unnamed woodland block sits to the foreground of the view, which lies adjacent to Yawthorpe Beck. This woodland provides visual interest in an otherwise flat landscape. In the middle ground, further agricultural fields are visible to the west (centre of view) and to the southeast (right of view), where dividing hedgerows and small woodland blocks are evident in contrast to the open arable fields. The distant horizon is vast and open with the land remaining flat all across the view. To the right of view, built from associated with Taskers Farm, Ancliff Farm, Home Farm and Park Farm are in the immediate foreground and middle ground of view. To the middle, beyond the hedgerow looking west, silhouettes of woodlands such as Birch Wood and Wharton Wood (northeast of Gainsborough) are just visible in the distant horizon. To the left of view the local route can be seen leading south where it forms a junction with Gainsborough Road.





In terms of forces for change for VP50, the management of the oak/birch woodlands are at risk from unsound management and their biodiversity interest could be improved by encouraging natural regeneration of native broadleaved species where possible. Th open character of the limestone plateau is also at risk and any redevelopment of the airfields should take account of this feature including protecting any features of historic interest. The condition of the Coversand Heathlands have also deteriorated through a lack of grazing.

**Overall**, the susceptibility of VP50 is conditioned by the areas of broadleaved woodland that is important to landscape character, but often small and fragmented and bolstered by the intervening shelterbelts and hedgerow networks. Expanding, buffering and connecting the fragmented seminatural habitats would improve their condition and make them more resilient. There is scope for extending access and interpretation of these many features to improve understanding and increase enjoyment of them. The relevant characteristics of the landscape therefore have some ability to accommodate change without undue adverse effects. There is scope to maintain the sense of place and the diversity of the settlements and landscape features through expanding and managing semi-natural habitats and providing more interpretation and access through good green infrastructure links.

Medium

#### Value of view

Medium

<u>Scenic:</u> The small settlements such as Yawthorpe have distinctive landscape elements which contribute to the special identity of the surrounding landscape and its value to the PRoW network. This includes their approaches and well-integrated wooded edges.

<u>Cultural:</u> These are a variety of woodland blocks including the small copses to the northeast of the settlement of Yawthorpe around Willhoughton Grange. The nearest listed buildings are within the settlement of Corringham, including the Grade I listed Church of St Lawrence (List Entry: 1064162). The Grade II listed Corringham Windmill stands just to the north of Corringham Road.

<u>Natural:</u> The landscape feels exposed in parts, but the combination of the blocks of woodlands such as Yawthorpe Covert and mature hedgerow trees provide a strong sense of enclosure and structure within the landscape. The woodlands within this landscape pattern are important as natural features.

<u>Recreation and Enjoyment:</u> This landscape setting to the settlement of Yawthorpe is important as an invigorating backdrop for recreation and enjoyment, particularly for those travelling along the A631 to the south.

<u>Local Distinctiveness and Sense of Place:</u> Roads and minor farm tracks are features of this landscape where hedgerows are absent, and views are expansive. This attribute contributes to local distinctiveness and 'sense of place'.

<u>Health and Wellbeing:</u> The tranquility associated with the minor tracks that lead to these small settlements such as Yawthorpe is important for health and well-being.

<u>Important Spatial Function:</u> These minor tracks and local roads can offer long westward views to the power stations on the River Trent, and eastward views to the scarp face of Lincoln 'Cliff', particularly along the A631.

**Overall**, the value of Viewpoint VP50 is shaped by the limited network of footpaths and bridleways giving rise to the importance of these local lanes and farm tracks for recreation. The sequence of views across the area towards woodlands and tree cover within the hedgerows that form the approaches to settlements are locally important features.

#### Sensitivity

Range of Features: This location comprises the local access road leading to a small settlement. This is an open location where the lack of hedgerows allows for extended visibility and an appreciation of the wider landscape. The built form within the settlement and small blocks of woodland at the edges help to frame views across the area. The variety of woodland blocks including the small copses to the northeast of the settlement of Yawthorpe around Willhoughton Grange are the key features of the view, otherwise there is a limited range of features.

Importance of View: This is an open location on the local road network at the edge of a small settlement, which dilutes the level of importance of the view. The view also has a limited combination of features but the lack of hedgerows along this section of the road extend visibility across the area. The sequence of views across the area towards woodlands and tree cover within the hedgerows that form the approaches to settlements are however locally important features.

Number of Receptors: This is the local road network at the edge of a small settlement. This route is likely to appeal to local users and those from a wider area may be limited due to this being a small settlement and minor roads.

#### **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Medium Not Applicable





#### Viewpoint VP50 - Yawthorpe

Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be screened due to the

distance and intervening hedgerows. During the

latter part of the construction stage, views would

become available of the elevated activities above

the hedgerows, but the distance would curtail any

effects to a narrow section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a small proportion of the view and not become a dominant feature. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact, and this would not result in a change to the view's composition. There would not be a fundamental change to the surroundings to the south and east of this location.

#### Operation (Year 1)

The foreground of the view as set in the context of a Yawthorpe Lane would not change. An unnamed woodland block sits to the foreground of the view, and this would remain as a feature of the view. In the middle ground, further agricultural fields are visible to the west where the panels will be placed between the dividing hedgerows and small woodland blocks. The distant horizon is vast and open with the land remaining flat all across the view and this would remain as a feature of the view. To the middle, beyond the hedgerow looking west, silhouettes of woodlands such as Birch Wood and Wharton Wood (northeast of Gainsborough) are just visible in the distant horizon, and this would not change. To the left of view the local route can be seen leading south where it forms a junction with Gainsborough Road and this feature would not be affected by the panel areas.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered Tree Belt

A strong belt of riparian species trees is proposed to the western boundary of Yawthorpe Beck to the east of the Cottam 2 Site. As well as mitigating views into the Site from Yawthorpe, the increased tree cover will enhance the character of the area locally and provide a strong buffer and ecological benefit to the beck along this stretch.

#### Shelterbelt

A small block of existing vegetation within the southeastern part of the Site is to be enhanced with shelterbelt planting to provide a small woodland appropriate to the setting and local character.

#### **Existing hedges**

Strong enhancement of hedges across the Site, in particular around H8 running both north/south and east/west, further help to break up the bulk of the panelled area and strengthen the field pattern locally enhancing the overall character.

Existing vegetation on the southern boundaries of fields H5 and H11 will further mitigate views from Yawthorpe with these hedges infilled and allowed to grow out to be managed at a height of 5m. Additional hedgerow trees will augment these intermittently treed boundaries helping to mitigate views of the Site beyond to the west and creating a strong layered effect.

#### **Grassland mixes**

A tall herb mix is proposed adjacent to the Yawthorpe Beck and this, together with the adjacent tree belt provide a 20m buffer to this watercourse. Additional areas of tall herb mix are proposed across the Site adjacent to existing watercourses setting panels back some 15m from these more minor watercourses.

#### **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, existing and proposed planting will have fully established and will have begun to mature creating a tapestry of layered vegetation within the landscape from this viewpoint. Hedgerow trees will have established but will not have matured but will provide some additional height to the scene and integrate the Schemeinto the landscape and adding to the relatively well treed mid-distance views. Longer-distance views will be of a well treed horizon where views through intervening vegetation exist.

The aim should be to plan new woodland in the most suitable locations. This may include in and around settlements, where woodland would help integrate new development into the landscape and in more intimate lowlying areas, where woodland would help create a mixed pattern of land use. Consideration should also be given to the management of existing trees and woodland, enhancing biodiversity value and age structure through new planting and the creation of woodland edge habitats. An increase in grassland reversion should also be encouraged, increasing the occurrence of semi-natural habitats.

**Overall**, in terms of mitigation for the Cottam 2 Site, due to the presence of mature trees within the hedgerows, the aims are to provide enhanced planting within the hedgerows to reinforce the lower parts of the hedgerow, whilst mitigating views across the area.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.

Shrubs: 0.9m at Year 1 and 5m at Year 15.

#### Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.



	Construction Access The viewpoint will not be affected by construction traffic in the foreground due to the distance between the viewpoint and the proposed construction access. Due to the flat nature of the landscape the construction traffic will be visible in the far distance.  Cable Route Corridor Viewpoint is outside of the 0.5km study area.  Substation/s This viewpoint is within the 2km study area and there are likely to be views of the Substation at Cottam 2 in the mid-distance directly to the west.	Elsewhere, a flower rich pollinator mix is proposed around existing underground services that run to the southeast of the Cottam 2 Site as well as to south and west facing hedgerows as appropriate. The remainder of the field boundaries are to be seeded with a tussock mix adjacent to new and existing vegetation  Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation		
Magnitude	Very Low	Low	Low	Very Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Minor - Moderate <b>Not Significant</b>	Minor Not Significant	Negligible <b>Not Significant</b>



Viewpoint VP50 – Yawthorpe							
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]					
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint 50 of the Cumulative Developments is Minor at year 1 of operation and Minor at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.					
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.					
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.					
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.2 [C6.4.8.15.2.2]</b> which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.					
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:					
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]					
		Overall Landscape Character of the Unwooded Vales  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area					
Magnitude	No Change	Construction: Low Operation (Year 1): Low Operation (Year 1) with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low					
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term					
Significance of Effect	No Change	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1) with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Minor Not Significant					



# Viewpoint VP54 - Bonsdale Lane just north of Corringham Beck

#### Viewpoint Baseline

The view is located on Bonsdale Lane just north of Corringham Beck, looking southeast directly over the Cottam 1 North Site beyond. The view is also looking north towards the Cottam 3b Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a slightly undulating, low-lying landscape within the wider context of a broad vale, which is conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop. There are some local variations in landform where the land rises to the west (left of view) just beyond Corringham to form a narrow spur known as Windy Ridge (at Mill Farm Windmill). To the north, the land falls towards the watercourse of Aisby Beck and to the south there is a gentle rise towards the A631 and Springthorpe Road (at Corringham Windmill). The landform also rises towards the east (right of view) towards the small settlement of Yawthorpe and Yawthorpe Fox Covert (rising from 18m AOD to 25m AOD). In terms of enclosure, there are very few woodland blocks or shelterbelts in the wider landscape other than Yawthorpe Fox Covert to the east and Wharton Wood towards the west. At closer proximity, there are a smaller woodland blocks, plantations and coverts around Hall Farm and Old Hall to the south and the woodland around the small settlement of Aisby to the north. To the east, west and south there are mainly open views and to the north Aisby closes down the visibility. In terms of man-made features, there is Corringham Grange Farm and The Cottage within the central part of the Site/Sites (outside the RLB) and Hall Farm and Old Hall Farm to the south. Within the settlement of Aisby to the north there are several properties centered on Aisby House Farm and Moscar Farm. Bonsdale Lane is a prominent feature particularly as this is a straight road in the context of an intensive arable landscape.

<u>Subjective:</u> The viewpoint depicts a large-scale, exposed landscape. In terms of variety, the hedgerows are a strong feature, but they are well cut back with few hedgerow trees. The hedgerows are present on both sides of the lane and there are grass verges that present a simple consistency and soft character to the view. The riparian vegetation along Corringham Beck is also a key feature of this view. In terms of texture and colour, the hedgerows are low cut and have a highly managed appearance and little texture, and there are muted and calm tones due to the simplicity of the landscape and general absence of features. Mast poles are prominent, however. The views tend to be interesting and almost invigorating given that the distant horizon reveals the landscape of the Limestone Scarps and Dipslopes Character Area 6a comprising woodland cover at Willhoughton and Hemswell.

<u>Overall:</u> The view is influenced by the presence of Bonsdale Lane, which is a detractor. The location offers some interesting features locally such as the riparian vegetation along Corringham Beck, but with more invigorating views out towards the surrounding landscape, which is large scale and exposed. The tree cover is limited, the hedgerows are cut back, and the arable land use is intensively managed, but the presence of far-reaching views adds some stimulus. The overall experience is that of an interesting and pleasant location with a safe and comfortable feeling due to the open nature. There are however fewer interesting features in the immediate context that draw down the quality of the more distant views.

#### **Receptors:**

This viewpoint is representative of views available to walkers, horse riders, motorists and residents using these local lanes at the northeastern edge of Corringham.

#### **Description of View:**

The foreground of the view is set in the context of a local lane that heads from Aisby turning north towards Bondsale Farm at the junction with Pilham Lane. There is a wide grass verge to each side of the lane fronting the hedgerow, with large scale arable fields beyond. The hedgerow is low cut and therefore allows views in all directions. In the middle ground, further agricultural fields are visible beyond the arable field in the foreground and these fields are divided by hedgerows. Strong mature trees and woodlands are also visible within the context of these hedgerows. This existing vegetation all serves to break up the open and extensive views across the landscape. To the left of view (east), the local lane takes an immediate right-angled turns north where the roofscape of Bonsdale Farm and the medieval village of Dunstall are just visible on the distant horizon. To the right of view) roofscapes for Aisby House Farm and Moscar Farm can also be seen in the distant horizon. In the far distance to the west (right of view) silhouettes of Wharton Wood and Birch wood (northeast of Gainsborough) are just visible on the horizon.



Medium



## **Receptor susceptibility to change**

In terms of forces for change for VP54, access to historic sites is limited, along with interpretation to raise awareness and improve understanding and enjoyment of local history. The deserted medieval villages are particularly sensitive but also testimony to subsequent change during the medieval period when farming developed to the perimeter of the Cliff Edge.

**Overall**, the susceptibility of VP54 is conditioned by the presence of several ground features, especially on the plateau, that includes prehistoric burial mounds, Roman artefacts and abandoned medieval villages. The relevant characteristics therefore have a limited capacity to accommodate change without undue adverse effects. However, there is scope for protecting these features and providing interpretation to bring them to the attention of a wider audience.

# Value of view

<u>Scenic:</u> The area supports an extensive network of rivers, dykes and ditches, which have little visual presence in the landscape since they are contained by high floodbanks and lack significant riparian vegetation. The vegetation along Corringham Beck is evident in this view.

<u>Cultural:</u> Parts of the landscape have remained unchanged, and this is particularly noticeable for some of the rural lanes where hedgerows are bordered by traditional meadowlands. The field systems to each side of Coringham Beck are smaller in scale but are not traditional meadowlands or areas of ancient enclosure.

Natural: The watercourses have been hugely modified for flood management and navigational purposes. The alignment of Corringham Beck has a straight alignment is to follow the local lane network and sections across the open fields have been improved. In most areas the watercourses form a deep wide channel with little in-stream habitat, but Corringham Beck has some riparian vegetation in this view.

<u>Recreation and Enjoyment:</u> The public right of way (PRoW) network is limited with many areas that are hard to access, making it difficult for people to enjoy the landscape. The local lanes are also rigid with tight hedgerows and uninviting straight alignments.

<u>Local Distinctiveness and Sense of Place:</u> The landscape supports a peaceful, undisturbed rural character where the meandering river channels hold remnant patches of riparian vegetation, such as this section of Corringham Beck.

<u>Health and Wellbeing:</u> The landscape has retained a relatively remote and undeveloped character. This character is enhanced by the stretches of riparian vegetation and strong hedgerows with tall trees.

Important Spatial Function: The watercourses themselves are not a visually dominant feature but their riparian vegetation is the important spatial function.

**Overall**, the value of Viewpoint VP54 is shaped by a low-lying flat agricultural landscape characterised by the intensive practices that have led to the loss of key landscape features. Surviving features include stretches of riparian vegetation along Corringham Beck and some strong hedgerows with tall trees that evoke feelings of intimacy at this location. Medium

# Sensitivity

Range of Features: This location comprises the local access road network connecting the small settlements of Corringham and Kirton in Lindsey. This is an open location where the low-cut hedgerows allow for extended visibility and an appreciation of the wider landscape. The riparian woodland along the small tributary of the River Till and the small blocks of woodland towards the northeast of Yawthorpe help to frame views across the area. The variety of woodland blocks and the riparian vegetation are the key features of the view, otherwise there is a limited range of features.

Importance of View: This is an open location on the local road network that provides a linkage between small settlements across the area, which dilutes the level of importance of the view. The view also has a limited combination of features but the low-cut hedgerows along this section of the road extend visibility across the area. The sequence of views across the area towards woodlands and tree cover within the hedgerows that form the approaches to settlements are however locally important features.

Number of Receptors: This is the local road network that provides linkages between small settlements across the area. This route is likely to appeal to local users and those from a wider area may be limited due to this being small settlements and minor roads.

Medium

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.





## **Viewpoint VP55 - Pilham Lane**

Construction

# Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and wibration from construction activities, duct

enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering the local lane and the hedgerow to the arable field beyond. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerows, but the hedgerows would provide some screening such that these activities would be confined to a narrow section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a small proportion of the view and not become a dominant feature. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact and assist with mitigation. There would not be a fundamental change to the surroundings to the north and west of this location.

# Operation (Year 1)

The foreground of the view set in the context of a local lane would not change. There is a wide grass verge to each side of the lane fronting the hedgerow, with large scale arable fields beyond and those fields in the foreground (as far as Corringham Beck) would not change. The hedgerow is low cut and therefore allows views in all directions and this would not change. In the middle ground, further agricultural fields are visible beyond the arable field in the foreground and these fields would become an area of panels, but the dividing hedgerows would help with the layering of the landscape and help the panels blend into this setting. Strong mature trees and woodlands are also visible within the context of these hedgerows, and they would also assist with integration. This existing vegetation all serves to break up the open and extensive views across the landscape and help the panels become part of this landscape. In the far distance to the west (right of view) silhouettes of Wharton Wood and Birch wood (northeast of Gainsborough) are just visible on the horizon and this would not change.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Scattered tree belt

A scattered tree belt is proposed to the northern boundary of field H1 adjacent to The Cottage reducing views south from Bonsdale Lane near Corringham Beck. This belt will also provide additional height and structure to this area which is currently somewhat exposed to the east with low cut existing hedgerows.

A further strong belt of riparian species trees is proposed to the western boundary of Yawthorpe Beck to the east of the Cottam 2 Site. The increased tree cover will enhance the character of the area locally and provide a strong buffer and ecological benefit to the beck along this stretch and further defining the watercourse.

#### **Shelterbelt**

A 5m shelterbelt is proposed to the western boundary of the Cottam 2 Site, infilling where existing vegetation is missing. This will provide a strong boundary and defined field patter, mitigate views, and integrate existing disparate vegetation, creating height where the landscape is somewhat exposed in places.

A shelterbelt to the east of The Cottage and Corringham Grange Farm is proposed to mitigate views east from these properties into the panelled areas.

#### Existing hedgerows

Existing hedgerows to the entrance to The Cottage are to be enhanced, being allowed to grow out, with hedgerow trees added.

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

By Year 15, the close-mid range views will be enhanced by the addition of trees and hedges with existing hedgerows allowed to grow out and be managed at 5m. Planting will have established and have begun to mature and will soften the views and enhancing the overall tree cover locally. In the distance, the proposed and existing planting will enhance the strong layered effect across the landscape with a wooded horizon where views exist.

The aim should be to plan new woodland in the most suitable locations. This may include in and around settlements, where woodland would help integrate new development into the landscape and in more intimate low-lying areas, where woodland would help create a mixed pattern of land use. Consideration should also be given to the management of existing trees and woodland, enhancing biodiversity value and age structure through new planting and the creation of woodland edge habitats. An increase in grassland reversion should also be encouraged, increasing the occurrence of semi-natural habitats.

**Overall**, in terms of mitigation for the Cottam 2 Site, due to the limited network of public rights of way (PRoW) across the area the aim is to enhance the local roads for their recreational importance. The aims are to extend the non-road network, especially where it can link people to woodlands and river corridors. Trees and hedgerows make an important contribution and improvements on approaches to villages could improve the identity of the local landscape for the benefit of recreation along these routes. These routes could allow for some trees to establish in the hedgerows to give more structure to the landscape.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



immediate foregroup to the distance being proposed construction we horizon as they he H5.  Cable Route Correction Viewpoint is within experience effects  Substation/s This viewpoint is we	Il not be affected be affected in the round by construction traffic due etween the viewpoint and the action access. In the far distance wehicles will be visible in the lead into the Cottam 2 Site at field	Further hedgerow enhancement is proposed to the northern, and western boundaries of field H6, strengthening the field pattern and providing some added height and structure to these boundaries and further mitigating views into the Site from the northwest.  Existing hedgerows are to be enhanced to the south of field H6 allowing this to grow out and be managed to a height of 5m. Additional hedgerow trees are to be provided to create a strong field boundary adjoining an area of proposed planting around an existing pond.  Native Shrub Planting  To the south of field H6, the existing pond, ditch and some lone field trees are to be incorporated into a block of native shrub planting in this area creating ecological enhancement whilst integrating disparate landscape features into the overall scene.  New hedges  New hedgerows with hedgerow trees are proposed around Corringham Grange Farm and The Cottage, mitigating views into the panelled areas and creating a strong buffer to theSite/Sites.  Grassland mixes  A flower rich pollinator mix is proposed around the two properties with a meadow set out between the two and an area to the south of Corringham Grange Farm creating a 50 buffer to the panelled area.  Elsewhere, tussock mixes are to be provided to the boundaries of existing and proposed vegetation with the flower rich pollinator mix proposed to south and westerly facing vegetation as well as beneath existing overhead power lines as appropriate	Growth of existing and proposed vegetation is assumed to be:  Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.  Shrubs: 0.9m at Year 1 and 5m at Year 15.	
		Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated		
Magnitude Low		infrastructure structures visible above existing vegetation	Low	Very Low
Type of Adverse & Short To	Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect  Minor Not Significance	ïcant	Minor Not Significant	Minor <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint VP	Viewpoint VP54 - Bonsdale Lane just north of Corringham Beck								
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]							
	In Summary  Between the Cottam 2 and Cottam 3a and 3b Sites, there would be no inter visibility due to distance, the intervening settlement of Aisby, and additional intervening hedgerows and tree cover. The intervening vegetation along the mainline railway would also provide additional screening and separation between Cottam 2 and Cottam 3a Site/Sites.	In Summary  The Cumulative Effects upon viewpoint 54 of the Cumulative Developments is Minor at year 1 of operation and Minor at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.							
	Between Cottam 3b and Cottam 3a Site/Sites, the changes would not be readily noticeable. In the context of the Cottam 3b Site, the Cottam 3a Site occupies only a very small portion of the view due to the intervening vegetation along the mainline railway and foreground hedgerows and tree cover and would not result in a highly noticeable change to the view's composition. There would be a small change to existing landscape elements beyond the railway line by the addition of the area of panels in place of an airfield at the Cottam 3a Site, but the visually detectable impacts do not alter the baseline of	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.							
	the receptor materially.	Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.2 [C6.4.8.15.2.2]</b> which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.							
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:							
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]							
		Overall Landscape Character of the Unwooded Vales  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area.							
Magnitude	Construction: Low-Medium Operation (Year 1): Low-Medium Operation (Year 1) with only Embedded Mitigation: Low-Medium Operation (Year 15): Low-Medium Decommissioning: Low-Medium	Construction: Low Operation (Year 1): Low Operation (Year 1) with only Embedded Mitigation: Low Operation (Year 15): Very Low Decommissioning: Low							
Type of Effect	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Adverse & Long Term Decommissioning: Adverse & Short Term	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term							
Significance of Effect	Construction: Minor-Moderate Not Significant Operation (Year 1): Minor-Moderate Not Significant Operation (Year 1) with only Embedded Mitigation: Minor-Moderate Not Significant Operation (Year 15): Minor-Moderate Not Significant Decommissioning: Minor-Moderate Not Significant	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1) with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Minor Not Significant							



## Viewpoint VP55 - Pilham Lane

#### **Viewpoint Baseline:**

The view is located along on Pilham Lane, Pilham looking southeast towards the Cottam 2 Site and northeast towards the Cottam 3b Site. The view is also looking south towards the Cottam 1 North Site.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a slightly undulating, low-lying landscape within the wider context of a broad vale, which is hardly conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop, but there are smaller pastoral fields of private planned enclosure to the south (left) of the view. There are some local variations in landform where the land rises to the west (left of view) just beyond Pilham Lane to form a narrow spur around Todd Lane Farm, extending from Corringham Scroggs (recreational woodland) towards the north. To the north, the land rises towards Glebe Farm at approximately 20m AOD to form a localized hill and to the south there is also a gentle rise towards Gilby at approximately 20m AOD. The landform also rises towards the east (right of view) towards Bonsdale Farm and the medieval village of Dunstall which rises to approximately 25m AOD. In terms of enclosure, there are very few woodland blocks or shelterbelts in the wider landscape other than Wharton Wood to the east Yawthorpe Fox Covert to the west. At closer proximity, there is some woodland around the settlement of Pilham and around Home Farm, Hollyoak Farm and Pilham Lane. The views are mainly enclosed at this location with most of the visibility extending towards the southeast. In terms of man-made features, there is the settlement of Pilham, otherwise Pilham Lane, Home Farm and development associated with Pilham Hall.

<u>Subjective:</u> The viewpoint depicts a medium to small-scale, enclosed, and intimate landscape. In terms of variety, the hedgerows, tree cover along Pilham Lane are a strong feature. The hedgerows are present on both sides of the lane and the route is single track lane that presents a rural character overall. In terms of texture and colour, the hedgerows are low, but the variety of tree cover presents provides an interesting texture and colourful tones. Mast poles are however prominent. The views tend to be pleasant and interesting in the immediate context of the Site/Sites and the distant horizon is hardly evident due to the strong cover along Pilham Lane.

<u>Overall:</u> The view is influenced by the rural character of Pilham Lane due to the single-track road and the wider grass verges to each side. The edge of the settlement is also a feature in the view due to the attractive buildings, which although not listed are constructed natural materials and distinctive to local character. The lane is enclosed by strong hedgerows and hedgerow trees with high canopies giving an open and safe feeling to the route. The location offers some interesting features, but there are no invigorating views out towards the surrounding landscape. The overall experience is that of a very pleasant location with a strong feeling of enclosure and intimacy.

#### Receptors:

This viewpoint is representative of views available to walkers, motorists, and residents on the northeastern edge of Pilham along Pilham Lane.

#### Description of View:

The foreground of the view is set in the context of Pilham Lane as it departs from the eastern edge of the settlement of Pilham. The foreground of the view shows Pilham Lane framed by hedgerows to the northern boundary (left of view) where there is a metal field gate within the hedgerow that provides access into an open grassland field. There are views across this field towards the horizon picked out by the mature tree cover that lines the route of public footpath (Pilh/20/1). There is a wide grass verge between the front of the hedgerow and Pilham Lane and the hedgerow is unmanaged with frequent gaps but is reinforced at the higher level with mature deciduous trees. The presence of the mature trees limits the views towards the northeast, including the Cottam 3b Site. On the horizon, across the grassland field, built form is just visible comprising the properties of Home Farm and Glebe Farm (to the northeast of this location). Views into the far distance are cut short by tall trees and hedgerows lining the public footpath that cuts across the front of Glebe Farm (left of view). Mast poles stand tall in the horizon and form a detracting feature in the landscape. To the right of view as Pilham lane meanders east, hedgerow trees line the road creating an intimate and pleasant route.



Medium



## **Receptor susceptibility to change**

In terms of forces for change for VP55, there is homogenization of the landscape and loss of hedgerows. However, there is an opportunity to reinforce landscape character and build in more diversity across the landscape especially in terms of retaining as many trees as possible and planting native trees to help screen and accommodate built development. There is also scope to build in landscape mitigation, particularly where the Ridge AGLV forms a continuous line at the foot of the steep slope and where the Gainsborough AGLV has an enclosed intimate character that meets with the more open character of the Till Vale.

**Overall,** the susceptibility of VP55 is conditioned by the striking differences across the varying elements of the AGLV and that these can be appreciated across the landscape from both the higher land of the ridge and the adjoining Till Vale. Particular areas for focus include the proportion of pasture to arable fields in particular those around the edges of settlements which are particularly important to landscape setting and form a subtle relationship. Within this AGLV, views are generally contained by tall hedgerows, woodlands, and tree groups, giving the landscape a very limited capacity to accommodate change. The relevant characteristics therefore have a limited susceptibility to accommodate change without undue adverse effects.

## Value of view

Medium

<u>Scenic:</u> The fragmented woodlands and tall hedgerow trees are distinctive as visual features in the landscape. The vegetation bordering the mainline railway is also a strong feature in views across the area.

<u>Cultural:</u> The land use is mainly productive arable farmland with many large fields under single crop, but there are smaller pastoral fields of private planned enclosure to the south within the context of the view which creates a mosaic to the northern part of the settlement.

<u>Natural:</u> The network of hedgerows within the farmland are punctuated by very distinctive mature trees which give the impression of a strong wooded setting to Pilham within the landscape to the north.

<u>Recreation and Enjoyment:</u> The area offers locations to appreciate the wider setting of Pilham for recreation and enjoyment through the local lane network including Pilham Lane, which extends east towards Bonsdale Farm.

<u>Local Distinctiveness and Sense of Place</u>: The hedgerows and tree cover along Pilham Lane are a strong feature with hedgerows present on both sides of the lane. The route is single track lane that presents a rural character overall and a strong 'sense of place'.

<u>Health and Wellbeing:</u> Pilham Lane is a route for walkers, cyclists and horse riders as a key location to boost health and well-being.

<u>Important Spatial Function:</u> The wide road verges add to the structural and spatial diversity of the lane and the tall poplar trees are distinctive features in combination with the cottages and farm buildings.

**Overall**, the value of Viewpoint VP55 is shaped by the vegetation bordering the mainline railway to the north. There are also smaller pastoral fields to the south that have strong hedgerows with mature tree cover. To the west the historic settlement of Pilham provides a sense of history to the view. To the east, Pilham Lane extends into the wider landscape where there is a sequence of attractive views back towards the settlement over the low-cut hedgerows.

## Sensitivity

Range of Features: This location comprises the local access road network at the outer edges of a small settlement. This is an enclosed location where the tall hedgerows and mature tree cover close down visibility and conceal any appreciation of the wider landscape. The mature tree cover along Green Lane helps to frame views across the area. The mature tree cover and tall hedgerows are the key features of the view, otherwise there is a limited range of features.

Importance of View: This is an enclosed location on the local road network at the edge of a small settlement, which dilutes the level of importance of the view. The view also has a limited combination of features and the tall hedgerows and mature tree cover help to close down views along this section of the road. The sequence of views across the area towards woodlands and tree cover within the hedgerows that form the approaches to settlements are however locally important features. The mature tree cover adds a distinctive feature to the view.

Number of Receptors: This is the local road network at the edge of a small settlement. This route is likely to appeal to local users and those from a wider area may be limited due to this being a small settlement and minor roads.

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

**Medium** Not Applicable





# Viewpoint VP55 - Pilham Lane

# Construction

Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be screened due to the presence of foreground hedgerow and the tree cover bordering the public footpath (Pilh/20/1). During the latter part of the construction stage, views would become available of the elevated activities above the vegetation lining the public footpath, such that these activities would be confined to a narrow section of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

These short-lived construction activities would obstruct a small proportion of the view and not result in a change to the view's composition. There would be a change to the arable land use in the fields beyond the foreground grassland field to the left of the view, but the field boundaries and the associated tree cover would remain intact and help provide mitigation. There would not be a fundamental change to the surroundings to the south of this location.

#### **Construction Access**

Viewpoint will not be affected by construction traffic due to the view being blocked by vegetation and built form to the proposed construction access.

#### **Cable Route Corridor**

Viewpoint is outside of the 0.5km study area.

#### **Operation (Year 1)**

The foreground of the view set in the context of Pilham Lane as it departs from the eastern edge of the settlement of Pilham would not change. The open grassland field (where there is a metal field gate within the hedgerow) will remain unchanged as an open grassland field. There are views across this field towards the horizon picked out by the mature tree cover that lines the route of public footpath (Pilh/20/1) and this will not change. The hedgerow to the north side of Pilham Lane is unmanaged and although there are frequent gaps the higher level with mature deciduous trees provide cover and screening. The presence of the mature trees limits the views towards the northeast, including the Cottam 3b Site. On the horizon, across the grassland field, built form is just visible comprising the properties of Home Farm and Glebe Farm (to the northeast of this location). Views into the far distance are cut short by tall trees and hedgerows lining the public footpath that cuts across the front of Glebe Farm (left of view). Mast poles stand tall in the horizon and form a detracting feature in the landscape. To the right of view as Pilham lane meanders east, hedgerow trees line the road creating an intimate and pleasant route.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### New hedges

A new hedge is proposed to the western boundary of field J1 where views from Glebe Farm are open to the Site of 3b. This will mitigate views from the west and, together with further hedge enhancement within the Site will strengthen the historical field pattern and character.

The new hedgerow to sit adjacent to the PRoW will connect with the existing vegetation to the south of fields J1 and J2 with this continuing through the Site to the south of fields J3,5 and 6.

A new hedgerow with trees is also proposed to the eastern boundary of field J4 mitigating views from further east along Green Lane.

#### Existing hedges

Existing hedges running north/south across the Site between fields J1,2,3 5 and 6 are variable and require enhancement. Infilling with new sections of hedgerow is required where these are missing, and the enhancement of existing hedgerows will be achieved

# Operation (Year 15)

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, the proposed new hedgerows will have established to create a strong field structure and screen views of theScheme. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. In the close-range, the new and enhanced hedgerows will screen Site/Sites with mid and longer distance views appearing as a layered well-treed landscape with a mid-range view of the railway line vegetation. There are no long-distance views due to the topography at this viewpoint.

**Overall**, in terms of mitigation for the Cottam 3a and 3b Sites due to the presence of mature trees within the hedgerows, the aims are to provide enhanced planting within the hedgerows to reinforce the lower parts of the hedgerow, whilst mitigating views across the area.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.

Shrubs: 0.9m at Year 1 and 5m at Year 15.

# **Decommissioning**

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



	Substation/s This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 3a and 3b.	by managing the hedges to a height of 5m and incorporating irregularly spaced hedgerow trees to create height and further mitigate views from both the east and the west. Field boundary planting and enhancement will also break up views of the Scheme from the south.  The western and southern boundary of field J4 is to be enhanced, being infilled as necessary, allowed to grow out and managed to a height of 5m with the addition of hedgerow trees as necessary. This will mitigate views into the Site from the south and strengthen the local character.  Grassland mixes  A tussock grassland mix is proposed to the field boundaries and within the proposed new PRoW hedged route, creating a visually interesting and natural walk. A block of tussock mix is also proposed outside the field boundary to the south of field B4.  Adverse effects:  Panels and structures across the landscape Increased hard standing areas Increased traffic locally Some minor light pollution within open countryside Substation, Battery storage and other associated infrastructure structures visible above existing vegetation		
Magnitude	Very Low	Very Low	Very Low	Very Low
Type of Effect	Adverse & Short Term	Neutral & Long Term	Neutral & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint VP	P55 – Pilham Lane	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	In Summary  Between the Cottam 2 and Cottam 3a and 3b Sites, there would be no inter visibility due to distance, the intervening settlement of Aisby, and additional intervening hedgerows and tree cover. The intervening vegetation along the mainline railway would also provide additional screening and separation between Cottam 2 and Cottam 3a Site/Sites.  Between the Cottam 3b and Cottam 3a Sites, the changes would not be readily noticeable. In the context of the Cottam 3b Site, the Cottam 3a Site occupies only a very small portion of the view due to the intervening vegetation along the mainline railway and foreground hedgerows and tree cover and would not result in a highly noticeable change to the view's composition. There would be a small change to existing landscape elements beyond the railway line by the addition of the area of panels in place of an airfield at the Cottam 3a Site, but the detectable impacts do not alter the baseline of the receptor materially.	In Summary  The Cumulative Effects upon viewpoint 55 of the Cumulative Developments is Minor at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.  **Eabric of the Landscape**  There would not be the removal of or changes in individual elements or features of the landscape within the character area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.  **Aesthetic Aspects of the Landscape**  Refer to Figure 8.15.2.2 [C6.4.8.15.2.2] which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.  There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
	Construction: Low Modium	Overall Landscape Character of the Unwooded Vales  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area.
Magnitude	Construction: Low-Medium Operation (Year 1): Low-Medium Operation (Year 1) with only Embedded Mitigation: Low-Medium Operation (Year 15): Low-Medium Decommissioning: Low-Medium	Construction: Low Operation (Year 1): Low Operation (Year 1) with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
Type of Effect	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Adverse & Long Term Decommissioning: Adverse & Short Term	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Construction: Minor-Moderate <b>Not Significant</b> Operation (Year 1): Minor-Moderate <b>Not Significant</b> Operation (Year 1) with only Embedded Mitigation: Minor-Moderate <b>Not Significant</b> Operation (Year 15): Minor-Moderate <b>Not Significant</b> Decommissioning: Minor-Moderate <b>Not Significant</b>	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1) with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Minor Not Significant



## Viewpoint VP57 - Bonsdale Farm

#### **Viewpoint Baseline:**

The view is located on Pilham Lane, near Bonsdale Farm, looking northwest almost directly over the Cottam 3b Site and southeast towards the Cottam 2 Site, with Cottam 1 North Site beyond.

Objective: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a very slightly undulating, low-lying landscape within the wider context of a broad vale, which is conspicuous at this location. The land use is mainly productive arable farmland with many large fields under single crop. There are some local variations in landform where the land rises to the west just beyond Station Road and Pilham to form a narrow spur around Todd Lane, extending from Corringham Scroggs (recreational woodland). To the north, the land rises towards Kirton Road at approximately 23m AOD and to the south there is a gentle fall towards Aisby Beck at approximately 17m AOD. The landform also rises towards the east (right of view) towards the medieval village of Dunstall which rises to approximately 25m AOD and towards Blyborough Covert beyond. In terms of enclosure, there are several woodland blocks and shelterbelts in the wider landscape including Wharton Wood to the east Yawthorpe Fox Covert to the west. At closer proximity, there is some woodland around Bonsdale Farm that comprises a dense shelterbelt to the east that extends north towards the mainline railway. The views are mainly open at this location with the visibility extending in all directions. In terms of man-made features, there is Bonsdale Farm and the presence of the junction where the straight network of lanes (including the unnamed road) converges as a strong influence.

<u>Subjective:</u> The viewpoint depicts a large-scale, open, and harmonious landscape. In terms of variety, the hedgerows are a strong feature, with several tree groups and there is also woodland cover to the east side of the lane at Bonsdale Farm, which forms part of a landscape of ancient enclosure field systems. The hedgerows on both sides of the unnamed road are low-cut allowing open and expansive views in all directions. In terms of texture and colour, there are colourful tones due to the presence of the mature trees and woodland and the close proximity of Bonsdale Farm. Mast poles are also prominent. The views are pleasant and interesting in the immediate context of the Site/Sites, and the distant horizon also reveals extended views towards the Limestone Scarps and Dipslopes Character Area 6a comprising woodland cover at Willhoughton, Willhoughton, Willhoughton Cliff and Blyborough. There are also extended views towards Laughton Common to the west showing a wooded horizon, which forms part of the Wooded Vales Character Area 4a. The vegetation along Aisby Beck and around the small settlement of Aisby is also a distinctive feature within the wider view. In the far distance trees around Blyton Level crossing are also distinctive.

<u>Overall:</u> The view is influenced by the open and exposed nature of the location. The unnamed road is defined by strong hedgerows and hedgerow trees dotted informally and with the adjoining woodlands and shelterbelt at Bonsdale Farm this gives a comfortable and pleasant feeling to the location. The location offers some interesting features locally, but with more invigorating views out towards the surrounding landscape, comprising of both eastward and westward views. The landscape is open and exposed, but the overall experience is that of a very pleasant location with invigorating views.

#### Receptors

This viewpoint is representative of views available walkers, motorists using Green Lane, Pilham Lane and the unnamed road. Receptors also include residents at Bonsdale Farm.

#### **Description of View:**

The foreground of the view is set at the junction of Green Lane and Pilham Lane near Bonsdale Farm. Pilham Lane runs North to South (extending from right of view to the left) and Green Lane extends west from this junction (middle of view). There is a wide grass verge to the front of the hedgerow bordering the highway. The hedgerow is low cut and does not influence views across the open arable fields, as a result there are views that extend across the open fields towards the mainline railway. In the middle ground, further agricultural fields are just visible, and their presence is enhanced by the dividing hedgerows and small woodland blocks that stand out in contrast to the open arable fields. The distant views reveal a vast horizon, however the rising landform to the north (right of view) limits views as far as the railway line. Other surrounding vegetation such as the shelterbelt to the north of Bonsdale Farm also limit views in this direction. To the centre of the view distant views of hedgerows and trees close down visibility towards the settlement of Pilham. To the left of view the Pilham Lane can be seen meandering south and distant roofscape of the Aisby House Farm is also visible in the far horizon. Bonsdale Farm and its associated woodland are a prominent feature in the landscape and the lack of tree cover allows for extended views along this local route.





Medium



#### **Receptor susceptibility to change**

In terms of forces for change for VP57, there is rapid change in some areas, for example the woodland in Laughton Woods has been substantially felled in the past. However new planting has been designed to include a mixture of conifers and native deciduous species. Since most of the distinctive landscape patterns and features such as skylines, river corridors and pastures are historic remnants, they are particularly vulnerable to landscape change. Also with the former airbases, local aviation landmarks (control towers, hangers, runway alignment etc.) are important features of the history of the area.

**Overall,** the susceptibility of VP57 is conditioned by the rapid change to the area's woodlands but that with new planting they can take on a different appearance over time. The improvement of the presence of airbases in the landscape requires a restoration of their structure which integrates with the scale and character of the surrounding farmland and field patterns. The West Lindsey's airbases currently have a strong and generally negative influence on local landscape character. The cost of developing these sites in this rural location is relatively high. These air bases represent a substantial under used land resource which has landscape potential. The relevant characteristics therefore have a very limited susceptibility to accommodate change without undue adverse effects. There is scope to change the areas of woodland and improve the land use of the former airfields.

#### Value of view

Medium

<u>Scenic:</u> The attractiveness of the landscape is typified by the strong minor road network, which is wide and sinuous in parts with prominent grass verges. The network also reflects the strong east to west alignment of the field patterns. Minor north south roads also occur in the landscape to the south of Pilham which allow views across the scenic landscape.

<u>Cultural:</u> The collection of medieval deserted settlements to the south of Pilham form part of a pattern that populate the Till Vale reflecting former routes of east west migration across the area.

<u>Natural:</u> Strong hedgerows are evident with a good coverage of mature trees and sinuous belts of woodland and shrubs define the local lanes, particularly in association with farmsteads such as Bonsdale Farm.

<u>Recreation and Enjoyment:</u> The tranquil experiential qualities are strong in many places and the sense of history is experienced through the medieval settlement pattern of small compact villages.

<u>Local Distinctiveness and Sense of Place:</u> This is focused on the winding route of Pilham Lane that stands out in contrast to the other more formal east west and north south routes that are typical to this landscape.

<u>Health and Wellbeing:</u> Rural tranquility remains a strong feature as the area is generally traversed by a smaller more informal historic road network.

Important Spatial Function: The view is influenced by the open and exposed nature of the location. The unnamed road is defined by strong, low-cut hedgerows with very few hedgerow trees. The adjoining woodlands and shelterbelt at Bonsdale Farm are prominent.

**Overall**, the value of Viewpoint 57 is shaped by the framed views towards the north which capture the distinctive belt of vegetation associated with Bonsdale Farm. To the south the view is influenced by the large-scale invigorating landscape and to the east Bonsdale Farm and associated outbuildings is the key feature of the view. Towards the west, there are attractive views of Pilham shrouded in tree cover. Large scale nature of the site could be made more intimate with the introduction of new planting.

# Sensitivity

Range of Features: This location comprises the local access road network linking the small settlements of Aisby and Corringham with Kirton in Lindsey. This is an open location where the low-cut hedgerows allow extended visibility and promote appreciation of the wider landscape. The tree and shrub belt bordering the mainline railway and the shelterbelt bordering Bonsdale Farm are key characteristics in views across the area, otherwise there is a limited range of features.

Importance of View: This is an open location on the local road network linking between small settlements, which dilutes the level of importance of the view. The view also has a limited combination of features. The low-cut hedgerows allow some extended visibility across the area, but the shelterbelt to the west of Bonsdale Farm and vegetation along the mainline railway help to close down views along this section of the road. The sequence of views across the area towards woodlands and tree cover within the hedgerows that form the approaches to settlements are however locally important features.

Number of Receptors: This is the local road network that links between small settlements across the area. This route is likely to appeal to local users and those from a wider area may be limited due to this being small settlements and minor roads.

Medium

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.





#### Viewpoint VP57 - Bonsdale Farm

Construction

# Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Pilham Lane and Green Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but these activities

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows

would be confined to a narrow section of

the view due to the presence of the

foreground hedgerows.

These short-lived construction activities would obstruct a small portion of the view and not become a dominant feature. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact and help with the assimilation of the panels at this location. There would not be a fundamental change to the surroundings to the south, east and west of this location.

#### **Construction Access**

The viewpoint will not be affected by construction traffic due to the distance between the viewpoint and the proposed construction access.

#### **Cable Route Corridor**

#### Operation (Year 1)

The foreground of the view would remain as a large arable field with a bordering hedgerow extending from Pilham Lane to meet with Green Lane. The fields beyond this arable field in the foreground would become an area of panels extending as far as the mainline railway. The existing hedgerow would now have become established to provide some screening of the panels in the foreground field and intervening hedgerows would also add structure and layering to the fields with panels beyond. The distant views of a vast horizon would be evident above the panels. Other surrounding vegetation such as the shelterbelt to the north of Bonsdale Farm would also remain as a feature of the view.

The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:

#### Shelterbelt

A shelterbelt is proposed to part of the northern boundary of field J6, creating a strong structure to this field boundary and further height to the local landscape. This may not be visible beyond intervening vegetation over the brow.

#### Existing hedges

Existing hedges within the Site, are to be enhanced, being allowed to grow out and managed at 5m whilst new tree planting will create visual interest and height along these boundaries. Enhancement will further mitigate views into the Site from the Bonsdale Lane and the PRoW.

The existing hedgerow to the south of the PRoW is also devoid of trees and creates very little interest to either road users on the Pilham Road or to pedestrians using the PRoW network. The existing route offers an open, inhospitable walk likely to be cold and windy at times. Tree cover and hedges managed to a greater height will provide relief from the elements and create a more varied visual experience. From the Pilham Road, the horizon will be well treed with randomly spaced native hedgerow trees breaking up the skyline.

Existing hedgerows to the south of field J4 are to be enhanced and with the introduction of native scattered tree adding to the height of the existing hedges which are to be allowed to grow out and managed to a height of 5m.

#### New hedges

At present the existing route of the PRoW heading east/west is exposed and somewhat windswept. A new hedge with hedgerow trees is proposed to the north of the PRoW on the southern boundaries of fields J1, 2, 3 and 6 creating a much more enclosed and intimate walk, whilst also strengthening the tree lined horizon from the Pilham Road and Bonsdale Lane.

New hedges are proposed running north/south where existing hedgelines are degraded, breaking up the overall site and strengthening the character of the existing field pattern.

A new hedgerow to the east of field J4 with irregularly spaced hedgerow trees along its length will mitigate views from the Pilham Road, Bonsdale Lane and Bonsdale Farm, whilst strengthening the historic field pattern locally.

#### Successional scrub

# **Operation (Year 15)**

With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.

At Year 15, to the southern boundary of the Cottam 3b Site, the proposed new hedgerows will have established to create a strong field structure and screen views of the development. Existing hedges will have been managed to grow out to 5m and proposed hedgerow trees will begin to reach some height, reinforcing the vertical structure locally. The view is mid-range with only the southern boundary vegetation visible on the skyline. The open nature of the surrounding landscape will be retained.

**Overall**, the mitigation for the Cottam 2 Site aims to promote enhanced planting, whilst mitigating views generally, strengthen the local character. The planting is designed to provide a significantly enhanced visual and perceptual pedestrian experience along the PRoW network across this landscape. Hedgerows are also allowed to grow out and strengthen their boundaries and relationship with the Road and to fit with planting along the railway line.

Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:

- Grassland reversion around field boundaries and PRoW
- Increased woodland/vegetation cover
- A more varied landscape
- Improved (more natural) management of exiting vegetation
- Less expanse of intensively managed arable land
- A less exposed and windswept landscape
- Water quality improvements
- Potential animal grazing
- Reinstatement of historic field patterns
- Bird mitigation fields
- Significantly improved biodiversity

Growth of existing and proposed vegetation is assumed to be:

Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.

New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.

Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.

Shrubs: 0.9m at Year 1 and 5m at Year 15.

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Decommissioning

Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.

With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.



	Viewpoint is within 0.5km study area and will experience effects at construction stage.  Substation/s This viewpoint is within the 2km study area and there would be mid-range views of the Substation at 3b but no view of the Substation at Cottam 2.	Successional scrub is to the planted to the northern boundaries of fields J1,2,3 and 5 at the base of the existing vegetation along the railway line, and although not visible from this viewpoint will add both visual and ecological benefit with low maintenance planting.  Grassland mixes A tussock grassland mix is proposed to the field boundaries and within the proposed new PRoW hedged route, creating a visually interesting and natural  Adverse effects:  - Panels and structures across the landscape - Increased hard standing areas - Increased traffic locally - Some minor light pollution within open countryside - Substation, Battery storage and other associated infrastructure structures visible above existing vegetation		
Magnitude	Low	Low	Low	Very Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Minor <b>Not Significant</b>	Moderate-Minor Not Significant	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>



Viewpoint VP	P57 – Bonsdale Farm	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary The Cumulative Effects upon viewpoint 57 of the Cumulative Developments is Minor at year 1 of operation and Minor at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area.
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
Magnitude	No Change	Construction: Low Operation (Year 1): Low Operation (Year 1) with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	No Change	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1) with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Minor Not Significant





## Viewpoint VP66 - Nthp/504/1

#### **Viewpoint Baseline:**

The view is located PRoW, Byway Open to All Traffic (BOAT) Nthp/504/1, looking southwest towards the Cottam 3a Site with the Cottam 3b Site and Cottam 2 Site beyond.

<u>Objective:</u> This viewpoint offers views over the Unwooded Vale Character Area 4a, which comprises of a gently rolling landscape within the wider context of the Wooded Vales Character Area 4b associated with Laughton Forest and Laughton Common. The land use predominantly arable interspersed with plantation woodland including Dallison Plantation that stands tall at the southwest corner of the view (right of view). This plantation mirrors the other coniferous woodland blocks in the area. In terms of man-made elements, there are very few detractors with plantation woodland being a consistent feature, however the electricity pylons in the far distance add discordancy to an otherwise harmonious landscape. The agricultural buildings and farmstead at Mount Pleasant Farm are also just visible in the view and mast poles are also visible above the horizon, creating a regular pattern.

<u>Subjective:</u> The viewpoint depicts a large-scale open landscape, comprising predominantly arable farmland interspersed with woodland areas where the views extend to distant horizons comprising long eastward and westward facing views. The open landscape is dominated by large scale woodland blocks that frame views, often to distant horizons as far as Northorpe and Kirton in Lindsey. In terms of variety, the views depict the stark contrast between the open arable fields (often without hedgerows) and the more enclosed parts adjacent to the areas of dense woodland where the landform falls away creating parts of local intimacy and enclosure. There are also isolated trees within hedgerows and small areas of riparian woodland along Northorpe Beck, and the woodland at Respect Green Burial Park is also just visible on the skyline.

Overall: The arable landscape is a plain feature but the contrasts with the woodlands and shelterbelts add interest and vibrancy to the views. The close proximity of the PRoW to these woodlands adds to the feelings of intimacy where they are adjacent and share characteristics. The views towards the west comprise a large-scale landscape in contrast to views towards the east where Northorpe Beck meanders across the landscape giving rise to varied topography and riparian woodland, which add a distinctive quality to these views. Overall, the location depicts a balanced landscape with a strong sense of isolation and solitude away from nearby settlement. Although the landscape of Laughton Woods is hardly evident on the horizon, this BOAT is important as north south connectivity in the context of these woodlands. Laughton Woods is a rare and unusual feature within this part of Lincolnshire and a focus for both formal and informal recreation. The overall experience is a very pleasant and invigorating location offering views of a rolling landscape that leads into a broad valley with east and west extended views that each depict a differing character.

#### Receptors

This viewpoint is representative of views available to PRoW users along the BOAT (Nthp/504/1), which is an important recreation route in the landscape to the east of Laughton Woods.

#### Description of View:

The foreground of the view is set in the context a large-scale arable landscape. The landform is shown rising towards the south (centre of view) extending into the far distance. To the centre-left of view (south-east) a small area of deciduous woodland to the north of Grange Farm is a notable feature and curtails visibility in thus direction. A haystack (as part of Grange Farm) can just be seen to the southeast (centre-left of view) to the right of the woodland on the horizon. In the far distance mast poles can be seen as they head west across the landscape. To the right of view (west) woodland that borders Northorpe Beck as it meanders further west is evident in the view. To the far horizon (right of view), the hedgerow and shelterbelt associated with Mount Pleasant Farm are just about visible due to the land flattening locally in this direction. Views from this location are limited and enclosed due to the rising nature of the landform, abruptly stopping any views to the southeast.





# Receptor susceptibility to change

In terms of forces for change for VP66, the landscape has a strong rural character, but tranquility levels are being disturbed by development pressures from the larger scale settlements and major routes across the area. Tranquility is however associated with the winding lanes and landscapescale projects such as the Trent Vale Landscape Partnership which can help by offering increased recreational and educational opportunities within these areas.

Overall, the susceptibility of VP66 is conditioned by the limited network of footpaths and bridleways and the availability of the rural roads and minor tracks for extended access. The relevant characteristics therefore have some scope to accommodate change without undue adverse effects. There is however a possibility to increase recreation opportunities including where there are natural features and historical elements to draw interest from residents and tourists.

Medium to High

# Value of view

Medium

<u>Scenic:</u> The viewpoint depicts a large-scale open landscape, comprising predominantly arable farmland. There is no strong relationship between this location and the nearby settlement or local landmarks and features.

<u>Cultural:</u> The open landscape is dominated by a large-scale arable land use that that is intensive. There are views to distant horizons as far as Northorpe and Kirton in Lindsey which have cultural associations, otherwise there are no known cultural references associated with this location.

*Natural:* The nature conservation interests of the area are constrained by the intensive agriculture with few hedgerows and hedgerow trees.

<u>Recreation and Enjoyment:</u> Many visitors to the area have the scenic drives and walks to appreciate the landscape, including the historic churches, and the long views between the Till Vale and the Lincolnshire Cliff. The presence of a BOAT provides additional ways to experience the landscape.

<u>Local Distinctiveness and Sense of Place</u>: This is a landscape of long views, particularly to the east comprising the scarp face of the Lincolnshire Cliff which features in many combinations/directions. To the west, the views towards the power stations are curtailed by the settlement of Gainsborough, its relative rising of land and associated woodland.

<u>Health and Wellbeing:</u> The landscape accommodates a variety of land uses to boost health and well-being and features such as a BOAT are key to this.

<u>Important Spatial Function:</u> The arable landscape is a bland feature but the contrasts with the woodlands and shelterbelts add interest and vibrancy to the views and give the area its spatial function.

**Overall**, the value of Viewpoint VP66 is shaped by the blandness of the open arable landscape. There is uplift to the location by virtue of extended views to distance horizons. The landscape accommodates a variety of land uses to boost health and well-being and features such as a BOAT are key to this. There is no strong relationship between this location and the nearby settlement or local landmarks and features.

# Sensitivity

Range of Features: This location comprises the public rights of way (PRoW) network. This is an open location where the absence of hedgerows allow extended visibility across the wide arable landscape. The tree and shrub belt bordering the mainline railway and the shelterbelt bordering Bonsdale Farm are key characteristics in views across the area, otherwise there is a limited range of features.

Importance of View: This is an open location in the wide arable landscape with a very limited combination of features. The absence of hedgerows allow extensive visibility across the area.

Number of Receptors: This is the PRoW network that links between small settlements across the area. This route is likely to appeal to local users and those from a wider area may be limited due to this being small settlements and minor local roads.

Medium to High

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.



[Reference: EN010133/APP/C6.3.8.3.2.4.31] January 2023										
Viewpoint VP	P66 - Nthp/504/1									
	Construction	Operation (Year 1)	Operation (Year 15)	Decommissioning						
	Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be screened due to the sloping nature of the landform. During the latter part of the construction stage, the rising landform and the riparian vegetation bordering the River Till would provide some screening such that these activities would be confined and not seen from this view.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows  These short-lived construction activities would not be evident within the view. There would be no change to the arable land use and any field boundaries, and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the southeast of Nthp/504/1.  Construction Access Viewpoint will not be affected by construction traffic due to the distance between the viewpoint and the proposed construction access.  Cable Route Corridor Viewpoint is outside of the 0.5km study area but there would be no view of the Substation at Cottam 3a or 3b.	The foreground of the view is a large productive agricultural landscape that is rising to the south and stretches itself into the far distance of this field and this will not change and remain agricultural. To the left of view, woodlands to the north of Grange Farm would continue to stand tall and limit views towards the southeast. Built form as part of Grange Farm can be seen to the to the south (left of view, right of woodland) as it stands tall into the horizon, and this would remain as a minor feature of the view. Views from this location are limited and enclosed due to the rising nature of the landform, abruptly stopping any views to the southeast. The Cottam 3a Site sits beyond the brow of a small hill, but overhead cables adjacent to the northeastern boundary of the Site are evident on the open skyline.  The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:  Existing hedges  Existing hedges  Existing hedges to the northeastern corner of Cottam 3a Site are to be enhanced with the addition of hedgerow trees. Some of these may be visible along the skyline in places from views along the BOAT.  New hedges  New hedgerows are proposed to the northern boundary and a stretch of norther eastern boundary adjacent to the existing power cables and set back from this. New irregularly spaced native hedgerow trees may be seen along the hedgerow from this viewpoint, softening the open skyline and integrating the power cables into the landscape.  Adverse effects:  Panels and structures across the landscape  Increased traffic locally  Some minor light pollution within open countryside  Substation, Battery storage and other associated infrastructure structures visible above existing vegetation	With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.  By Year 15, vegetation will have established and begun to mature. Some glimpses of hedgerow trees may be visible on the skyline breaking up the view and strengthening the character locally within this open landscape.  Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:  Grassland reversion around field boundaries and PROW  Increased woodland/vegetation cover  A more varied landscape  Improved (more natural) management of exiting vegetation  Less expanse of intensively managed arable land  A less exposed and windswept landscape  Water quality improvements  Potential animal grazing  Reinstatement of historic field patterns  Bird mitigation fields  Significantly improved biodiversity  Growth of existing and proposed vegetation is assumed to be:  Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.  Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.  With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.						
Magnitude	Very Low	Low	Low	Very Low						
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term						
Significance of Effect	Negligible <b>Not Significant</b>	Minor Not Significant	Minor Not Significant	Negligible <b>Not Significant</b>						



Viewpoint VF	P66 - Nthp/504/1	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint 66 of the Cumulative Developments is Negligible at year 1 of operation and Negligible at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area.
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Low
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant





## Viewpoint VP67 - Monson Road

#### **Viewpoint Baseline:**

The view is located along Monson Road, Northorpe, looking southwest towards the Cottam 3a Site and Cottam 3b Site, with the Cottam 2 Site beyond.

<u>Objective</u>: This viewpoint offers views over the Unwooded Vales Character Area 4a, comprising of a plateau landscape within the context of a wider rolling and Wooded Vale to the west of Northorpe and Kirton in Lindsey. The land use is settlement edge looks out towards a predominantly arable interspersed with several small woodland blocks and some hedgerows. The topography is varied with the settlement of Northorpe occupying and area of locally higher ground at approximately 20m AOD. The landscape extends west towards Grange Farm where the topography generally remains at 20m AOD. To the north, the landform falls towards Northorpe Beck and to the south the land is generally 20m AOD then rising towards the medieval village of Southorpe which rises to around 25m AOD. Overall, views to the north and west are open in contrast to the south where the mainline railway and rising landform closes down views and to the east the settlement of Northorpe impedes visibility. In terms of man-made features, Monson Road is dominant along with the residential properties at the edge of the settlement.

Subjective: The viewpoint depicts a large-scale, landscape that is open and exposed due to the lack of hedgerows and intensive arable fields. The main area of woodland is located to the west of the settlement of Northorpe and mainly associated with Northorpe Hall and parkland known as The Park. Further tree cover is associated with Northorpe Beck, otherwise the landscape is largely devoid of tree cover. In terms of variety, the combination of features is limited to occasional hedgerows, small woodland blocks, riparian vegetation along the watercourse and tree cover within Northorpe itself. The woodlands add some interest in terms of their regular, geometric plantation, otherwise the open arable fields add little benefit to the view. In terms of texture, this is an almost bland landscape with very few distinctive features other than the large plantation and the hedgerows between the large-scale field systems. Monson Road is also set below the field level, and this adds some intimacy to the view, enhanced by winding alignment of the road as it skirts Northorpe Hall to the west.

<u>Overall:</u> This is a very open, simple landscape that supports intensive agriculture with a distinct lack of hedgerows and tree cover. The deciduous woodland blocks and woodland associated with Northorpe Hall, and The Park are the neatest attractive features which add balance and a sense of familiarity. The overall feeling is a pleasant and interesting location at the edge of the settlement with wide open views, but there are very few individual features of interest.

#### Receptors:

This viewpoint is representative of views available to walkers and motorists travelling on Monson Road and for residents along the southern edge of the settlement of Northorpe.

#### **Description of View:**

The foreground of the view is set in the context of Monson Road and comprises a narrow grass verge forming the boundary between the road and the arable field beyond. The landform is shown as gently rising up to the south (left of view) and also sloping down to the north (right of view). The view shows a highway footpath bordering the eastern side of Monson Road (right and left of view). There is extended visibility along the Monson Road to the north (left of view) as it opens towards the centre of the settlement of Northorpe. In contrast, the visibility along Northorpe Road to the south (left of view) is curtailed as the road rises and takes a slight bend before leaving the settlement. To the middle ground directly to the west of the Northorpe Road is an expansive arable field with no hedgerow divisions. There is however an area of woodland to the western boundary for the field (right of view) which stands out on the horizon. To the north (right of view) there is a small watercourse which separates the arable field from the residential properties. The watercourse is lined with riparian vegetation which joins with the large woodland on the horizon to give a well-treed context to the view. In the far distance the landform rises to reveal further agricultural fields in the context of the large woodland block that stands tall on the skyline. Monson Road continues towards the south to form a junction with the B1205 and Southorpe Lane.





# Receptor susceptibility to change

In terms of forces for change for VP67, large urban expansions can be expected on the edges of Gainsborough as an area for growth. Other proposals for development including industrial developments could increase traffic levels. The landscape to the north-east of Gainsborough is noted for its distinct absence of large-scale features. This is possibly due to the presence of Laughton Forest and other areas to the south-west that are well-wooded (Wharton Wood and Birch Wood) with the market town of Gainsborough beyond. The area is also host to the Laughton Area of Greater Landscape Value (AGLV). The impacts on the road networks that cross this area from an increase in traffic could be a major consideration.

Overall, the susceptibility of VP67 is potentially conditioned by the sensitivity of the villages/hamlets and that the area is relatively sparsely populated with a network of local lanes throughout the surrounding countryside. However, there is an opportunity to protect and enhance the character of these settlements to ensure that these features continue to be perceived as 'islands' of buildings and trees in the flat landscape where churches are landmarks. The relevant characteristics of the landscape therefore have some ability to accommodate change without undue adverse effects given there is scope to protect the setting of the settlements with additional tree planting and other landscape mitigation such as planting within fields.

Medium

# Value of view

Medium

<u>Scenic:</u> Nucleated settlement patterns follow major routes with spring line villages along the foot of the Lincolnshire Cliff with some estates and parklands such as Northorpe.

<u>Cultural:</u> The main area of woodland is located to the west of the settlement of Northorpe and mainly perceived as an association with Northorpe Hall and parkland known as The Park.

<u>Natural:</u> As well as woodlands around Northorpe Hall and The Park, further tree cover is associated with Northorpe Beck, otherwise the landscape is largely devoid of hedgerows and tree cover.

<u>Recreation and Enjoyment:</u> The parklands and estates are important historic features including their ancient woodlands and veteran trees that enhance the settings to settlements. The settlement of Northorpe is host to extensive parkland and pleasure grounds at Northorpe Hall.

<u>Local Distinctiveness and Sense of Place:</u> The 'sense of place' and inspiration is mainly derived from accessible viewpoints within the settlements that enjoy the extended views over their associated landscape setting.

<u>Health and Wellbeing:</u> Panoramic views out over the landscape to the west can be enjoyed from a few locations in Northorpe and these are mainly focused along Monson Road.

<u>Important Spatial Function:</u> The spatial character of the area is provided by the large-scale arable landscape, which features geometric woodland blocks as a backdrop in some views.

**Overall**, the value of Viewpoint VP67 is shaped by the presence of the open and expansive arable landscape in close proximity to the edge of Northorpe. This landscape can be appreciated from Monson Road in the context of the Northorpe Hall which is an historic parkland estate. The juxtaposition of the open arable landscape, Northorpe and Northorpe Hall is an interesting combination of features to appear in views across the area.

#### Sensitivity

Range of Features: This location comprises the local road network within a small settlement. This is a part open location where the absence of hedgerows allows extended visibility across the arable landscape from the edge of the settlement. The main area of woodland is located to the west of the settlement of Northorpe and mainly perceived as an association with Northorpe Hall and parkland known as The Park and is the key characteristic in views across the area, otherwise there is a limited range of features.

Importance of View: This is a part open location with framed views across an arable landscape with a very limited combination of features. The absence of hedgerows allows extensive visibility across the area.

Number of Receptors: This is the local road network that links between small settlements and the local road network across the area. This route is likely to appeal to local users and those from a wider area may be limited due to this being small settlements and minor local roads.

Medium

# **Embedded Mitigation**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include the following measures:

Panels to be set a minimum of 15m from adjacent PRoW.

Panels to be set a minimum of 50m from adjacent residential property boundaries.

Panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses.

Panels to be set a minimum of 3m from Site boundaries.

Existing hedges are to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.



Viewpoint VP	67 – Monson Road			
	Construction	Operation (Year 1)	Operation (Year 15)	Decommissioning
	Activities considered includes, site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be screened due to the presence of the trees and woodland in the distance associated with Grange Farm and the rising landform. During the latter part of the construction stage, views would not be available of the elevated activities above the existing woodland.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows  These short-lived construction activities would not be evident within the view. There would be no change to the arable land use from the construction and the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the west of Monson Road.  Construction Access  Viewpoint will not be affected by construction traffic due to the distance between the viewpoint and the proposed construction access.  Cable Route Corridor  Viewpoint is outside of the 0.5km study area but there would be no view of the Substation at Cottam 3a and 3b.	The foreground of the view would not change in the context with Monson Road and the arable field beyond. The views would still capture the landform as gently rising up to the south (left of view) and also sloping down to the north (right of view). The extended visibility along the Monson Road to the north would continue to be a feature of the view in contrast to the road as it rises and takes a slight bend before leaving the settlement. To the middle ground directly to the west of the Northorpe Road is an expansive arable field with no hedgerow divisions and this would not change. The panels would be set within the landscape beyond the area of woodland which stands out on the horizon and so would not appear in the view due to the rising landform and the distance to the receptor. The trees on the horizon are those associated with Grange Farm driveway and the Site is not evident beyond this. Tree planting to the eastern boundaries of the Cottam 3a Site is unlikely to be visible from this viewpoint.  The effects set out below for Year 1 include secondary mitigation which will have been carried out, but will have had limited physical or visual impact at this stage:  Existing hedges  Existing hedges  Existing hedges  Existing hedges to the northeastern corner of the Cottam 3a Site are to be enhanced with the addition of hedgerow trees. Some of these may be visible along the skyline in places from views along the BOAT.  New hedges  New hedgerows are proposed to the northern boundary and a stretch of norther eastern boundary adjacent to the existing power cables and set back from this. New irregularly spaced native hedgerow trees may be seen along the hedgerow from this viewpoint, softening the open skyline and integrating the power cables into the landscape.  Adverse effects:  Panels and structures across the landscape  Increased hard standing areas  Increased hard standing areas  Increased traffic locally  Some minor light pollution within open countryside  Substation, Battery storage and other associated infrastruc	With secondary mitigation such as planting and grass seeding being taken into account at the operational stage (Year 15) the following changes to the landscape would occur and the visual effects are set out below.  By Year 15, vegetation will have established and begun to mature. Some glimpses of hedgerow trees may be visible on the skyline breaking up the view and strengthening the character locally at the edge of the settlement.  Between Years 1 and 15, the following beneficial effects will be achieved in terms of Visual Receptors:  Grassland reversion around field boundaries and PRoW Increased woodland/vegetation cover A more varied landscape Improved (more natural) management of exiting vegetation Less expanse of intensively managed arable land A less exposed and windswept landscape Water quality improvements Potential animal grazing Reinstatement of historic field patterns Bird mitigation fields Significantly improved biodiversity  Growth of existing and proposed vegetation is assumed to be:  Woodland/trees and shelterbelts: 2.5m max at Year 1, 7.5m max at Year 15.  New hedgerows: 0.6m at Year 1 and 3.5m at Year 15.  Existing hedgerows: 0.9m at Year 1 and 5m at Year 15.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning including site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.  Following decommissioning, the land is likely to be returned to arable production. The Site will however benefit from the significantly enhanced tree and hedgerow planting that has been carried out and has begun to mature to create a much stronger and robust landscape, retaining and enhancing the overall character and providing considerable biodiversity benefits over the years. Bird mitigation fields are likely to be retained and the potential may exist to retain grass margins to preserve some varied land use and maintain long-term improvements in biodiversity in the local area, all of which will benefit visual receptors.  With secondary mitigation considered, the negative effects of the physical decommissioning will be balanced out by the long term landscape and visual effects of this mitigation.
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Short Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor Not Significant	Negligible <b>Not Significant</b>



viewpoint vi	P67 – Monson Road	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	In Summary There would be no intervisibility between the Cottam 1 Site/Sites, Cottam 2 Site, and Cottam 3a and 3b Sites, due to distance and existing intervening vegetation cover. Therefore, there no in combination visual effects are anticipated.	In Summary  The Cumulative Effects upon viewpoint 67of the Cumulative Developments is Minor at year 1 of operation and Minor at year 15 with mitigation. This is due to the limited impact upon the view as a result of the segregated nature of the Sites and Cumulative Developments and proximity to the visual receptor. Existing vegetation and Embedded and Secondary Mitigation proposed would screen the panels and therefore the effects upon the view are reduced in combination.
		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area.
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Siteand Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1) with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1) with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1) with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant



# Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.3.1: Residential Receptors – Residential Overview

[Reference: EN010133/APP/C6.3.8.3.3.1.1] January 2023

Reference	Name	Туре	Easting	Northing	Site	Distance to Site (m)	Potential Cumulative Yes/No	Potential Cumulative (List which Sites)	Relevant Viewpoint/s	Receptor Baseline	Primary Mitigation (Embedded)	Secondary Mitigation	Significant Effects	Notes
R03	Mount Pleasant Farm	Singular building	487362	397469	Cottam 3a	551	N	n/a	VP66	Farmstead with agricultural buildings and business premises (Lawn Mower Shop). Main dwelling with north facing aspect looking towards Dallison Plantation and east aspect looking towards Northorpe. Collection of outbuildings to west and south aspect. Mature tree cover bordering north, south and west boundary of curtilage. Open aspect to east boundary looking towards Northorpe and partially open aspect to south boundary looking towards Cottam 3a Site/Sites.	Not applicable	Not applicable	No	Unlikely visibility towards Cottam 3a Site/Sites or 3b Sites due to the partially enclosed aspect of the property curtilage. The flat, low lying landform and intervening hedegrows provide additional layering in the landscape and further curtail visibility. Scope out.
R07	Grange Farm	Singular building	488323	397048	Cottam 3a	627	N	n/a	VP66	Farmstead with agricultural buildings and business premises (Brush and Clippers Dog Grooming). Main dwelling with south facing aspect looking towards adjacent business premises with Blenheim Farm (R11) beyond. Collection of outbuildings to west and north aspect. Mature tree cover bordering south boundary of curtilage. Open asect to the east curtilage looking towards Northorpe.	Not applicable	Not applicable		No visibility towards Cottam 3a or Cottam 3b Site/Sites, due to closed aspect to property curtilage. The flat, low lying landform and intervening hedegrows provide additional layering in the landscape and further curtail visibility. Scope out.
R08	Dring Lane	Singular building	486496	396934	Cottam 3a	689	N	n/a	LCC-C-T	Respect Green Burial Park with collection of agricultural buildings, including access tracks and storage sheds. Burial park and agricultural buildings are located towards the northern end of the curtilage and both are inward facing with no open aspect. There is mature tree cover and tall hedgerows to all boundaries.	l Not applicable	Not applicable	No	No visibility towards Cottam 3a or Cotttam 3b Site/Sites, due to fully closed aspect to property curtilage. The flat, low lying landform and intervening hedegrows provide additional layering in the landscape and further curtail visibility. Scope out.
R09	Cold Harbour	Singular building	487218	396468	Cottam 3a	63	N	n/a	VP60	Blyton Park Racing Centre with parking and access tracks. Main administrative building is a large scale storage shed with no clearly defined aspect or outlook. The immediate curtilage to the shed has at open aspect towards the north, west and east and a partially open aspect towards the south. There is a collection of outbuildings (R10) to the south of the shed, with a mature belt of scrub and tree cover beyond.	Panels set back from boundary of curtilage.	New planting bordering the west and east and part planting to the north boundaries of the immediate curtilage.	No	Open visibility towards Cottam 3a Site/Sites but new planting along the west, east and part north boundaries of the immediate curtilage will curtial visibility in Year 1 and close down visbility in Year 15. The collection of outbuildings (R10) curtail visibility towards the south.
R10	Cold Harbour	Singular building	487221	396321	Cottam 3a	86	N	n/a	VP60	Collection of outbuildings with parking and access tracks with no clearly defined aspect or outlook. The immediate curtilage to the outbuildings have a partailly open aspect towards the north and the Blyton Park Driving Centre (R09) and an open aspect towards the south with a mature belt of scrub and tree cover beyond. There is an open aspect towards the west and east.	Panels set back from boundary of curtilage.	New planting bordering the west, east and south boundaries and part planting to the north boundaries of the immediate curtilage.	No	Open visibility towards Cottam 3a Site/Sites but new planting along the west, east, south and part north boundaries of the immediate curtilage will curtial visibility in Year 1 and close down visibility in Year 15. The Blyton Park Driving Centre (R09) curtails visibility towards the north.
R11	Blenheim Farm	Singular building	487958	396141	Cottam 3a	134	N	n/a	VP61	Farmstead with large collection of agricultural buildings and business premises (Blenheim Farm). Main dwelling is situated just off the B1205 (Kirton Road) with south facing aspect looking towards the road. There is also an open aspect to the east looking towards Northorpe Hall and Northorpe (R06) and to the north towards Grange Farm (R07). The large collection of agricultural buildings are located twest of (and some distance from) the main dwelling. Woodland and mature tree cover borders the north, south and west boundary of the agricultural buildings and the south boundary of the dwelling house.	0	Not applicable	No	No visibility towards Cottam 3a or 3b Site/Sites due to the existing woodland and mature tree cover along the west and south boundaries of the dwelling house and the intervening agricultural buildings. Scope out.
R13	Blue Bell Farm	Group of buildings	486158		Cottam 3a	97	N	n/a	VP63	Farmstead (Blyton Grange) with extensive collection of outbuildings, agricultural buildings, access tracks, parking and storage areas. Main dwelling has south and east facing aspect with additional outbuilding; that are north and east facing. There are woodlands and hedgerows to the north, west and east boundaries. There is a partially open aspect to the south with some garden planting and a wall, but with a further tall conifer hedegrow beyond.	Panels set back from boundary of curtilage.	New planting bordering the west, east and south boundaries of the immediate curtilage.	No	Open visibility towards Cottam 3a Site/Sites but new planting along the west, east and south boundaries of the immediate curtilage will curtial visibility in Year 1 and close down visibility in Year 15. The mature tree cover to the east boundary of the curtilage further curtails visibility.
R13	Blue Bell Farm Sewage Works	Group of buildings Singular building	486158 485355		High voltage cable corridor and a	938.379286 411	N	n/a	LCC-C-U	Sewage works with single track access off Blyton Road to the east. Sit surrounded by tree cover on all sides with additional internal areas of woodland and mature tree cover along the access track. No open aspect or outlook.		Not applicable	No	No visibility towards Cottam 3a or 3b Site/Sites due to the existing woodland and tree cover around the boundaries of the Sewage works site and additonal mature tree cover along the access track. There is also intervening hedgerows and tree cover between the sewage works and Laughton Road. Scope out.
R18	Southorpe Farm	Singular building	488574	395262	Cottam 3a	540	N	3b	VP59	Farmstead with outbuildings and agricultural buildings with access track from Bonsall Lane to the west. Main dwelling has a south, west and east facing aspect with additional outbuildings to the north. There are woodlands and hedgerows to the south, west and east boundaries of the garden curtilage with further woodland and tree cover bordering the mainline railway to the south.	Not applicable	Not applicable	No	No visibility towards Cottam 3a Site/Sites due to the existing woodland and tree cover around the boundaries of the garden curtilage and additonal mature tree and woodland cover along the mainline railway. There is also a tall hedgerow to the east side of Bonsall Lane. Scope out.
R18	Southorpe Farm	Singular building	488574	395262	Cottam 3b	632	N	3a	VP59	Farmstead with outbuildings and agricultural buildings with access track from Bonsall Lane to the west. Main dwelling has a south, west and east facing aspect with additional outbuildings to the north. There are woodlands and hedgerows to the south, west and east boundaries of the garden curtilage with further woodland and tree cover bordering the mainline railway to the south.	Not applicable	Not applicable	No	No visibility towards Cottam 3b Site/Sites due to the existing woodland and tree cover around the boundaries of the garden curtilage and additonal mature tree and woodland cover along the mainline railway. There is also a tall hedgerow to the east side of Bonsall Lane. Scope out.
R19	Unnamed	Group of buildings	486493	395259	Cottam 3a	62	N	3b	LCC-C-T	Large-scale agricultural buildings with access track from Kirton Road to the south. No residential dwelling and the agricultural buildings have a southwest main frontage and entrance. There are hedgerows to the south, west and part-east boundaries of the site.  Large-scale agricultural buildings with access track from Kirton Road	Not applicable	Not applicable	No	Agricultural building. Scope out
R19 R19	Unnamed	Group of buildings Group of buildings	486493 486493		Cottam 3b  High voltage cable corridor and a	752 occess 243.168471	N	3a	LCC-C-T	to the south. No residential dwelling and the agricultural buildings have a southwest main frontage and entrance. There are hedgerows to the south, west and part-east boundaries of the site.	Not applicable	Not applicable	No	Agricultural building. Scope out

R20	The Fields Farm	Group of buildings	486694	395003	Cottam 3a	168	N 3b	LCC-C-T	Farmstead with two dwellings comprising 'The Fields' to the north and 'The Cottage' to the south. There are agricultural buildings with hard standing and access tracks to the south of 'The Cottage' known as 'The Fields Farm'. There is a strong hedgerow to the west boundary of the garden curtilages and strong hedge to the north side of Kirton Lane. There is further woodland and tree cover bordering the mainline railway to the south. 'The Cottage' has open aspect to the north, south and east, but the agriculural buildings at 'Fields Farm' close down any visibility to the south along with the tree cover along the mainline railway, intervening field boundaries and the hedrgwos along Kirton Road .	New planting bordering the south boundary of the 3a Site/Sites fronting Kirton Road to supplement the existing hedgerow.	No	Oblique visibility from upper floor of windows of 'The Fields' towards Cottam 3a Site/Sites. Limited and oblique visibility from 'The Cottage' due to boundary hedgerows fronting Kirton Road and the land falling towards the south.New planting along the south boundary of the 3a Site/Sites fronting Kirton Road will curtial visibility in Year 1 and close down views in Year 15.
R20	The Fields Farm	Group of buildings	486694		Cottam 3b	447	N 3a	LCC-C-T	Farmstead with three dwellings comprising 'The Fields' to the north, then 'The Cottage', then 'The Fields Farm' to the south of the site. There are agricultural buildings with hard standing and access tracks to the south of 'The Fields Farm'. There is a strong hedgerow to the west boundary of the garden curtilages and strong hedge to the north side of Kirton Lane. There is further woodland and tree cover bordering the mainline railway to the south. 'The Fields' has open, but oblique views from the first floor windows of the front aspect of the property, but ground floor views are curtailed by the front boundary hedgerow and the hedgerow to the north side of Kirton Road.	Not applicable	No	No visibility towards Cottam 3b Site/Sites due to intervening hedgerows and tree cover and strong woodland and tree cover along the mainline railway. Scope out.
R20	The Fields Farm  Grange Farm	Group of buildings  Singular building	486694		High voltage cable corridor and access  Cottam 3a	153.723094 265	N 3b	LCC-C-T	Farmstead with single dwelling to the south of the site with its main aspect facing towards the southeast. There are agricultural buildings to the northwest of the dwelling and a strong hedgerow to the northeast boundary of the garden curtilage. There are also mature trees and shrubs to the south, west and east boundaries of the garden curtilage and there is further woodland and tree cover bordering the mainline railway to the south. The fields also support a strong hedgerow network and hedgerows to both sides of Kirton Road.The dwelling has open, but oblique views from the first floor windows, but ground floor views are curtailed by the garden boundary vegetation.	Not applicable	No	Unlikely visibility towards Cottam 3a Site/Sites due to intervening hedgerows within the field network to the south of Kirton Road. There is also tree cover along Kirton Road. Views are also oblique and the landform falls away from the 3a Site/Sites towards Grange Farm. Scope out.
R21	Grange Farm	Singular building	486585		Cottam 3b	365	N 3a	LCC-C-T	Farmstead with single dwelling to the south of the site with its main aspect facing towards the southeast. There are agricultural buildings to the northwest of the dwelling and a strong hedgerow to the northeast boundary of the garden curtilage. There are also mature trees and shrubs to the south, west and east boundaries of the garden curtilage and there is further woodland and tree cover bordering the mainline railway to the south. The fields also support a strong hedgerow network and hedgerows to both sides of Kirton Road.The dwelling has open, but oblique views from the first floor windows, but ground floor views are curtailed by the garden boundary vegetation.	Not applicable	No	Unlikely visibility towards Cottam 3b Site/Sites due to intervening hedgerows within the field network to the south of Kirton Road. There is also dense tree cover along the mainline railway. Scope out.
R21	Grange Farm	Singular building	486585	394883	High voltage cable corridor and access	302.61679			Farmstead with single dwelling to the north of the garden curtilage			
R22	Top Farm	Singular building	487455	394871	Cottam 3a	377	N 3b	VP59	with its main aspect facing towards the south. There are agricultural buildings to the northwest of the dwelling and a tall, strong hedgerow to this boundary. There are also mature trees and shrubs to the south, west and east boundaries of the garden curtilage and there is further woodland and tree cover bordering both sides of the mainline railway to the south. The surrounding fields also support a strong hedgerow network with some tree cover. The dwelling has open views from the first floor windows, but ground floor views are curtailed by the garden boundary vegetation.	New planting bordering the south boundary of the 3a Site/Sites fronting Kirton Road to supplement the existing hedgerow.	No	Limited visibility towards Cottam 3a Site/Sites due to intervening hedgerows within the field network to the south of Kirton Road. There is also tree cover along Kirton Road. The landform also falls away from the 3a Site/Sites towards Top Farm.
R22	Top Farm	Singular building	487455		Cottam 3b	95		VP59	Farmstead with single dwelling to the north of the garden curtilage with its main aspect facing towards the south. There are agricultural buildings to the northwest of the dwelling and a tall, strong hedgerow to this boundary. There are also mature trees and shrubs to the south, west and east boundaries of the garden curtilage and there is further woodland and tree cover bordering both sides of the mainline railway to the south. The dwelling has open views from the first floor windows, but ground floor views are curtailed by the garden boundary vegetation.	Existing vegetation along mainline railway already forms a strong and a robust screen.	No	Limited visibility towards Cottam 3b Site/Sites due to intervening dense tree cover along both sides of the mainline railway. Top Farm is also set back to the north part of the garden curtilage and the panels are set beck back from the mainline railway frontage to the south.
R22 R22	Top Farm Top Farm	Singular building Singular building	487455 487455		High voltage cable corridor and access High voltage cable corridor and access	399.766794 783.547134						
R23	Blyton	Town or Village	485327	394814	Cottam 3a	807	N 3b		: :: =	New planting bordering the west boundary of the 3a Site/Sites to supplement the existing hedgerows and tree belts.		Limited visibility due to the exisitng strong boundary vegetation to the west side of the Cottam 3a Site/Sites, inlcuding tree belts, hedgerows and small geometric blocks of trees. New planting will curtail visibility in Year 1 and close down visibility in Year 15.
R25	Glebe Farm	Singular building	486517	394187	Cottam 3a	948	N 3b	VP56	Residential dwelling located to the northeast of the settlement of Pilham served by an access track off Station Road. The track is also a public footpath (Pilh/20/1). The dwelling is located to the northwest of the garden curtilage with outbuildings occupying the eastern part of the plot. The main outlook and aspect from the property is east west with a north facing gabled addition. The garden curtiage is fully enclosed with mature tree cover on all boundaries and theer is an adjoining field hedgerow to the east of the property.	Not applicable	No	No visibility towards Cottam 3a Site/Sites due to intervening hedgerows within the field network to the north and south of the mainline railway. There is also tree cover to each side of the mainline railway and riparian tree cover along Laughton Highland Drain. Scope out.
R25	Glebe Farm	Singular building	486517	394187	Cottam 3b	161	N 3a	VP56	Residential dwelling located to the northeast of the settlement of Pilham served by an access track off Station Road. The track is also a public footpath (Pilh/20/1). The dwelling is located to the northwest of the garden curtilage with outbuildings occupying the eastern part of the plot. The main outlook and aspect from the property is east west with a north facing gabled addition. The garden curtiage is fully enclosed with mature tree cover on all boundaries and theer is an adjoining field hedgerow to the east of the property.	New planting bordering the west boundary of the 3b Site/Sites to include a new tree belt.	No	Limited visibility due to the provision of new strong boundary vegetation to the west side of the Cottam 3a Site/Sites, inlcuding a tree belts, which will curtail visbility in Year 1 and close down visibility in Year 15.

R25	Glebe Farm Glebe Farm	Singular building	486517 486517		High voltage cable corridor and access	667.889799 780.693387							
R26	Bonsdale Farm	Singular building  Group of buildings	486517		High voltage cable corridor and access  Cottam 3b	780.593387 321 N	n/a	VP57	Farmstead with three dwellings and large scale agricultural buildings, parking, storage and outbuildings. The dwellings comprise 'Tawny House', 'Highfield' and 'Bonsdale Farm' and all have their aspects facing south towards the Cottam 2 Site/Sites. The agricultural buildings fully occupy the plot to north of the dwellings and close down any visibility in this direction towards the Cottam 3b Site/Sites. There are also mature trees and shrubs to the garden curtilage of 'Tawny House' and there is further woodland and tree cover bordering Bonsall Lane. The surrounding fields to the south also support a strong hedgerow network with some tree cover.	Not applicable	Not applicable	No	No visibility towards Cottam 3b Site/Sites due to intervening agricultural buildings to the north and the woodland and tree cover bordering Bonsall Lane to the northwest. The surrounding fields also support a strong hedgerow network with some tree cover and close down any views towards the south and the Cottam 2 Site/Sites. Scope out.
R26	Bonsdale Farm	Group of buildings	488188	394067	High voltage cable corridor and access	470.964749							
R28	Pilham	Group of buildings	486237	393807	Cottam 3b	586 N	n/a	VP55	Residential dwellings grouped to the north side of the settlement of Pilham between Firs Farm. Station Farm Hollyoak House and Home Farm. At this location, the landscape supports significant groups of tree cover, including rows of mature trees within hedgerows and a strong tree and hedgerow network bordering the public footpath (Pilh/20/1) that passes to the south of Glebe Farm.	Not applicable	Not applicable	No	No visibility towards Cottam 3b Site/Sites due to intervening tree and hedgerow cover to the north of Pilham. The strong tree cover bordering both sides of the public foopath (Pilh/20/1) also closes down visibility. Scope out.
R30	Dunstall	Singular building	488955	393735	Cottam 2	733 N	n/a	VP57	Agricultural building.	Not applicable	Not applicable	No	Agricultural building with no residential visibility. Scope out.
R31	Gilby	Singular building	486367	393319	Cottam 3b	927 N	n/a	VP52	Farmstead with a large scale agricultural building, barns and outbuildings and a farmhouse to the south of the plot. There is also a further small group of dwellings to the north known as 'Gilby Cottages'. There are mature trees and shrubs to the garden curtilage of the farmhouse and the surrounding fields to the north, south and east also support a strong hedgerow network with some tree cover.	Not applicable	Not applicable	No	No visibility towards Cottam 3b Site/Sites due to the intervening settlement of Aisby. The surrounding fields to the north, south and east also support a strong hedgerow network with some tree cover. Scope out.
R32	Aisby	Group of buildings	487251		Cottam 2	890 N	n/a	VP53	Collection of farmsteads and residential dwellings, including Netherdene Farm, Dale Farm, Swallow House, Aisby House Farm and Moscar Farm. The building group is set back from Bonsall Lane and there is a strong woodland block to the southeast of Moscar Farm.	Not applicable	Not applicable	No	No visibility towards Cottam 2 Site/Sites due to the strong woodland block to the southeast of Moscar Farm. The surrounding fields to the north, south and east also support a strong hedgerow network with some tree cover. Scope out.
R32	Aisby The Cottage	Group of buildings  Singular building	487251 488028		High voltage cable corridor and access  Cottam 2	199.951625	n/a	VP49	Two storey dwelling situated to the north of Coringham Grange Farm within an elongated plot. The main aspect of the dwelling is facing south over lawned gardens with some tree cover to the west and south (closer to the property). There are field hedgerows to the north comprising a double hedgerow (running east west) and a further hedegrow running north south to the west of the access track that serves both this property and Corringham Grange Farm.	Panels set back from all boundaries of the 'The Cottage' and 'Corringham Grange Farm'.	New planting bordering the north, south,west and east boundary of both 'The Cottage' and 'Corringham Grange Farm' to include a new tree belts, hedgerows and hedgerow trees.	No	Visibility in all directions towards the Cottam 2 Site/Sites from the first floor, where the windows are north south focused. To the north there would be a short area of panels with Corringham Beck in the background. To the south views would be mainly focussed on the Corringham Grange curtilage and area of panel 'set back'. Views from the ground floor would be mainly curtailed by the bordering field hedgerows and by the close proximity of Corringham Grange. Planting mitigation would curtail views at Year 1 and close down views at Year 15.
R33	The Cottage	Singular building	488028	392155	High voltage cable corridor and access	294.977304							
R34	Yawthorpe	Group of buildings	489643	391971	Cottam 2	549 N	n/a	VP50	Collection of farmsteads, including Ancliffe Farm, Home Farm, Taskers Farm and Park Farm. The building group is set back behind a strong woodland block to the south of Taskers Farm. Riparian vegetation along Yawthorpe Beck and intervening hedgerows and topography close down views.	Not applicable	Not applicable	No	No visibility towards Cottam 2 Site/Sites due to the strong woodland block to the south of Taskers Farm. The surrounding fields to the west also support a strong hedgerow network with some tree cover and riparian vegetation along Yawthorpe Beck is a strong feature. Scope out.
R35	Hall Farm & Old Farm	Group of buildings	487315	391967	Cottam 2	401 N	n/a	LCC-C-P	Hall Farm, Old Farm and Keeper's Cottage are all located to the north of the settlement of Corringham just to west of Bonsall Lane. Hall Farm is located to the southwest of the plot with a south facing aspect that overlooks the woodland at Old Hall. There are large-scale agricultural buildings to the east of the plot with parking areas and hard standing. Keeper's Cottage is a two storey property, which overlooks Bonsall Lane with its main elevation facing east towards Corringham Beck. Old Hall is located to the south of Hall Farm and is shrouded in tree cover all round its curtilage.	boundary of Cottam 2	New scattered tree planting along Corringham Beck and enhancement to hedgerows within field boundary to the south of the beck as far as East Lane.		Visibility towards Cottam 2 Site/Sites for Keeper's Cottage from upper floor windows to front elevation of property looking east directly towards the Site/Sites. Views from ground floor windows would be curtailed by the bordering hedgerows to each side of Bonsall Lane. Planting mitigation would curtail views at Year 1 and close down views at Year 15.
R35	Hall Farm & Old Farm	Group of buildings	487315	391967	High voltage cable corridor and access	765.448652							
R36	Corringham Grange Farm	Singular building	488025		Cottam 2	71 N	n/a	VP49	Two storey dwelling situated to the south of 'The Cottage' within a broadly rectangular plot. The main aspect of the dwelling is facing south over lawned gardens with some tree cover to the west and southeast (closer to the property) and further tree cover and hedgerows defining the domestic curtilage to the west, south and east. There are field hedgerows to the southeast comprising a double hedgerow (running north south) defining the access track that serves both this property and 'The Cottage' and a further hedgerow running east west to the south of the property. To the north, the majority of the plot is occupied by large-scale agricultural buildings and to the east there is a small area of woodland.	Panels set back from all boundaries of 'Corringham Grange Farm' and 'The Cottage'.	New planting bordering the north, south, west and east boundary of both 'Corringham Grange Farm' and 'The Cottage' to include a new tree belts, hedgerows and hedgerow trees.	No	Visibility to the south, west and east towards the Cottam 2 Site/Sites from the first floor, where the windows are mainly south focused. To the south there would be a short area of panels with East Lane beyond. To the west, there would also be a short area of panels with views mainly focussed on the woodlands at Old Hall. To the west, there is a large area of woodland that would close down views at close range. Views from the ground floor would be mainly curtailed by the bordering field hedgerows and the curtilage planting. Planting mitigation would curtail views at Year 1 and close down views at Year 15.
R36 R36	Corringham Grange Farm	Singular building	488025 488025		High voltage cable corridor and access High voltage cable corridor and access	572.568033 960.823077							
R38	Corringham Grange Farm  Corringham	Singular building  Town or Village	488025		High voltage cable corridor and access  Cottam 2	960.823077 782 N	n/a	VP48	Residential properties at the eastern edge of the settlement of Corringham fronting East Lane. The dwellings are set to each side of the road frontage with their main aspects facing north south. Properties to the south side are well 'set back' from the lane frontage behind mature front gardens. There is a dense shelterbelt to the north side of East Lane and a small block of woodland to the south side of thr lane that both close down views towards the Site/Sites.	Not applicable	Not applicable	No	No visibility towards Cottam 2 Site/Sites due to the strong woodland blocks and shelterbelt at the eastern edge of the settlement. The residential properties also have a north south aspect and are set back behind mature front gardens. Scope out.
R39	Corringham Windmill	Singular building	487942		Cottam 2	443 N	n/a	VP46	Derelict building	Not applicable	Not applicable	No	Derelict building. Scope out.
R39 R40	Corringham Windmill  Magin Moor Cottages  Magin Moor Cottages	Singular building Singular building Singular building	489619 489619	390823	High voltage cable corridor and access  Cottam 2  High voltage cable corridor and access	958 N	n/a	VP45	Detached, two-storey dwelling just off the A631 to the south of the settlement of Yawthorpe and west of Hemswell Grange. The property is north south facing with the rear elevation looking over the agricultural landscape towards the wooded horizon at Yawthorpe. There is substantial tree cover within the rear garden around the north, west and east boundaries.	Not applicable	Not applicable	No	No visibility towards Cottam 2 Site/Sites due to the north south aspect of the property, the distance and the strong tree cover within the rear garden to the north, west and south boundaries. Scope out.
R44	Grange Cottage	Singular building	489287		High voltage cable corridor and access	338.514687							
R45	Springthorpe Grange	Group of buildings	489440	390089	High voltage cable corridor and access	477.009723							
R46 R50	Unnamed	Singular building	488168		High voltage cable corridor and access	518.396548	-						
K50	Low Field Farm	Singular building	490468	387334	High voltage cable corridor and access	300.87881				<u>I</u>		1	

R51	Westlands Farm	Singular building	491711	387312	Cottam 1	843 N	n/a VP41	Farmstead with single dwelling and large scale agricultural buildings. The dwelling comprises a collection of barns arranged a four side foldyard and all have their aspects facing in all directions. The agricultural buildings fully occupy the plot to north of the dwellings and close down any visibility in this direction towards the Cottam 2 Site/Sites. There are also mature trees and large woodland blocks tha fully enclose the grounds to the property.	Not applicable t	Not applicable	No	No visibility towards Cottam 1 North Site/Sites due to the property grounds being fully enclosed with large woodland blocks. Scope out.
R52	Low Farm	Singular building	492043	387210	Cottam 1	764 N	n/a VP41	Farmstead with single dwelling and large scale agricultural buildings. The dwelling comprises a collection of barns arranged a four side foldyard and all have their aspects facing in all directions. The agricultural buildings fully occupy the plot to north of the dwellings and close down any visibility in this direction towards the Cottam 2 Site/Sites. There are also mature trees and large woodland blocks tha fully enclose the grounds to the property.	Not applicable t	Not applicable	No	No visibility towards Cottam 1 North Site/Sites due to the property grounds being fully enclosed with large woodland blocks. Scope out.
R53	Glentworth Grange	Singular building	492386	387197	Cottam 1	568 N	n/a VP41	Detached dwellling with adjacent barns to the west converted to residential use. There open views over Kexby Road towards the south from the main dwelling and similar views from the barn conversions. The hedgerows to the south side of Kexby Road are low-cut with few trees that allow views south out over the arable fields towards Cottan 1 North.	boundaries of the	Tree planting and hedgerows to north boundary of the Site/Sites.	No	Visibility to the south towards the Cottam 1 Site/Sites from the first floor of the main dwelling, where the windows are mainly south focused. Views from the ground floor would be mainly curtailed by the hedgerow bordering field hedgerows to Kexby Road frontage. Planting mitigation would curtail views at Year 1 and close down views at Year 15.
R54	Spitals Farm	Singular building	491995	387126	Cottam 1	673 N	n/a VP41	Detached, single dwelling in large grounds. The dwelling comprises a collection of barns arranged a three side foldyard and all have their aspects facing in three directions. The agricultural buildings occupy the plot to northeast of the dwellings There are also mature trees an large woodland blocks that fully enclose the grounds to the property to the south.	Not applicable	Not applicable	No	No visibility towards Cottam 1 North Site/Sites due to the property grounds being fully enclosed with tree planting and with being set back from the road frontage. Scope out.
R60	Glebe Farm	Singular building	493132	385343	Cottam 1	88 N	n/a VP23	Farmstead with single dwelling on a long, narrow plot off Willingham Road and with large scale agricultural buildings and some barn conversions. The main dwelling has a north south aspect with the front elevation facing over Willingham Road. The agricultural buildings occupy the plot to north of the main dwelling and close down any visibility in this direction. There is a further property (Greystones Farm) to the south side of Willingham Road which closes down views towards the south.	Panels set back from north boundary of Cottam 1 Site/Sites.	New planting bordering the north, boundary of the Site/Sites to include new tree belts, hedgerows and hedgerow trees.	No	Limited visibility south towards Cottam 1 North Site/Sites due to the partially open views above hedgerows bordering Kexby Road. Greystones Farm to the north closes down some views in this direction. Planting mitigation would curtail views at Year 1 and close down views at Year 15.
R60	Glebe Farm	Singular building	493132	385343	Cottam 1 internal cable corridor	220.209772						
R61	Greystones Farm	Singular building	492980	385188	Cottam 1	50 N	n/a VP32, VP33 and LLC-C-G	Detached, single dwelling on a long, narrow plot bordering Willingham Road with a large scale agricultural building to the west. The main dwelling has a north south aspect with the front elevation facing over Willingham Road. The agricultural building occupies the plot to west of the main dwelling and closes down any visibility in this direction. There is a mature tree cover to the south side side of the plot, which closes down views in this direction.	Panels set back from north boundary of Cottam 1 Site/Sites.	New planting bordering the north, boundary of the Cottam 1 Site/Sites to include new tree belts, hedgerows and hedgerow trees.	No	Limited visibility to the south towards Cottam 1 North Site/Sites, but the large agricultural building and planting along the south boundary blocks some visibility in this direction. Planting mitigation would curtail views at Year 1 and close down views at Year 15.
R61	Greystones Farm	Singular building	492980	385188	Cottam 1 internal cable corridor	78.179521						
R62	Turpin Farm	Singular building	491217		Cottam 1	29 N	n/a LCC-C-I	Turpin Farm to the south side of Willingham Road and further collection of dwellings to the north side of Willingham Road, known as Turpin's Bungalow. Turpin Farm comprises agricultural and stable buildings with no evidence of residential occupancy. Turpins Bungalow comprises a terrace of single storey dwellings separated from the road frontage by a short ditch and low-cut hedgerow. There is also a further two storey double fronted (handsome) brick dwelling set back from the road frontage behind a belt of mature trees with outbuildings to the rear.		New planting bordering the north, south, east and west of the Cottam 1 North Site/Sites set back from boundary withTurpin's Bungalow and Turpin Farm. Planting to the north side of Willingham Road.	No	Limited visibility to the north towards Cottam 1 North Site/Sites from the detached two storey dwelling due to the mature tree cover to the north, west and south of the property. The outbuildings to the south also close down visibility towards the east. The single storey terrace have partially enclosed views towards the north over the Cottam 1 North Site/Sites, due to the tree cover within the rear gardens. The terrace also has views towards the south across Willingham Road over Cottam 1 North. Planting mitigation would curtail views at Year 1 and close down views at Year 15.
R62	Turpin Farm	Singular building	491217		Cottam 1 internal cable corridor	728.219799						
R62	Turpin Farm  North Farm	Singular building  Group of buildings	491217		High voltage cable corridor and access  Cottam 1	795.413068		North Farm comprises a main dwelling and a small collection of outbuildings that are both served by a single access track off Willingham Road. The main dwelling is a two-storey house that is located towards the northern part of a rectangular plot. The collection of outbuildings is located to the west of the main house and they help to close down visibility in this direction. The main dwelling has a north south orientation, with the pricipal elevation facing south over a lawned plot. This lawned plot is bordered by a low hedgerow to the west where it shares a boundary with the access track and a taller hedgerow (and trees) to the south boundary that is shared with Willingham Road. These bordering hedgerows helps to curtial visibility towards the south and west from the lawned part of the plot. There is an area of deciduous woodland to the north and secondary elevation of the plot which also expendes creating in this distretion. As expenses	Removal of field parcel to the northwest of the plot (which is the rear elevation of the property). This is where the woodland cover is absent, allowing open visibility in this direction.	northwest of the property where the field parcel is removed. New planting within the hedgerows to the south of the property to mitigate views from the first floor principal bedroom	No	North Farm: Visibility from North Farm to the south towards Cottam 1 North Site/Sites. The existing hedgerows would be supplemented with new planting along the boundaries of the field margins to provide additional layering in the landscape. This planting would help curtial views at Year 1 and almost close down views at Year 15 in the summer months.
								of the plot, which also provides screening in this direction. An orcharc is located to the east of the main dwelling, which also helps to close down views. The main areas of open visibility are located to the south and northeast of the property. The main focus of visibility is experienced from from the first floor principal bedroom of the main dwelling.		windows.		
R63A	North Farm	Group of buildings	491896	385647	Cottam 1 internal cable corridor	33.111104		is located to the east of the main dwelling, which also helps to close down views. The main areas of open visibility are located to the south and northeast of the property. The main focus of visibility is experienced from from the first floor principal bedroom of the main dwelling.		windows.		
R63A R63B	North Farm Side Farm	Group of buildings  Group of buildings	491896 491670		Cottam 1 internal cable corridor  Cottam 1	33.111104 33 N	n/a LCC-C-I	is located to the east of the main dwelling, which also helps to close down views. The main areas of open visibility are located to the south and northeast of the property. The main focus of visibility is experienced from from the first floor principal bedroom of the main	Panels set back from boundary of Side Farm, in particular towards the east.	New planting bordering the north, south, east and west	No	Side Farm: Visibility from Side Farm to the north towards Cottam 1 North Site/Sites, but some views are filtered due to the intervening agricultural building and stable block. The mature tree cover closes down views towards the west and planting along the watercourse to the south helps to break down visibility. There are open views towards the east. Planting mitigation would curtail views at Year 1 and close down views at Year 15. With North Farm, there is open visibility towards the south, but intervening hedegrows help with layering and close down views.
				385067			n/a LCC-C-I	is located to the east of the main dwelling, which also helps to close down views. The main areas of open visibility are located to the south and northeast of the property. The main focus of visibility is experienced from from the first floor principal bedroom of the main dwelling.  Side Farm is a farmstead with single dwelling towards the southern end of the plot. A large scale agricultural building and stable block (or long barn) to the northern part of the plot. The dwelling has a north south orientation, with the main elevation facing south over lawned gardens enclosed by mature tree cover to the west and south boundaries. The agricultural building closes down any visibility towards the north and there are also mature trees along the watercousre to the south, which is a tributary of the River Till. There is an open aspect from the dwelling towards the east. North Farm lies to the north of Side Farm with visibility towards Cottam 1 North	Panels set back from boundary of Side Farm, in particular towards the east.	New planting bordering the north, south, east and west of the Cottam 1 North Site/Sites set back from	No	Site/Sites, but some views are filtered due to the intervening agricultural building and stable block. The mature tree cover closes down views towards the west and planting along the watercourse to the south helps to break down visibility. There are open views towards the east. Planting mitigation would curtail views at Year 1 and close down views at Year 15. With North Farm, there is open visibility towards the south, but intervening hedegrows help with

R64	Slate House Farm	Singular building	489302	384909	Cottam 1	460	N	n/a VP38 and Li C-J	Farmstead with single dwelling towards the northern end of the plot almost adjacent to Fillingham Lane. There are large scale agricultural buildings to the southern part of the plot, which close down views in this direction. The dwelling has a north south orientation, with the main elevation facing over a small front garden to Filligham Lane and a further small garden enclosed with mature woodland tot he rear. There are also a field boundary hedgerows to the east and west (in the landscape to the south) which also help to close down visibility in this direction.	Not applicable	Not applicable	No	No visibility towards Cottam 1 North Site/Sites due to the property grounds being fully enclosed with tree cover and hedgerow cover and agricultural buildings. Scope out.
R64	Slate House Farm	Singular building	489302	394000	High voltage cable corridor and access	571.978348							
R65	Lowfield Farm	Singular building	489867	384440	Cottam 1	146 (	N	n/a VP38	Farmstead with single dwelling occupying a long, narrow plot just off South Lane. The dwelling is located towards the western end of the plot and there are other outbuildings and barns to the south. The dwelling has a east west orientation, with the main front elevation facing west over mature tree cover and the east facing elevation looking out across a long narrow garden enclosed with mature tree cover and hedgerows. The woodland closes down any visibility towards the west, but there is a partially open aspect from the dwelling towards the east.	Panels set back from boundary of Lowfield Farm, in particular towards the west.	New planting bordering the north, south, east and west of the Cottam 1 North Site/Sites set back from boundary with Lowfield Farm.	No	Limited visibility to the east and west towards Cottam 1 North Site/Sites . The mature tree cover in the front garden of the property closes down some views towards the west and further tree cover within the garden to the rear helps to break down visibility towards the east. Planting mitigation would further curtail views both east and west at Year 1 and close down views at Year 15.
R65	Lowfield Farm Lowfield Farm	Singular building Singular building	489867 489867		High voltage cable corridor and access High voltage cable corridor and access	35.804299 853.412874							
R66	Willingham by Stow	Town or Village	487518		Cottam 1	919 [	N	n/a VP39, VP40 and LCC-C-I	Residential dwellings grouped towards the east side of the settlement, comprising four areas around Grange Lane, The Paddocks Cot Garth Lane and Grange Farm. With Grange Lane, the dwellings ar set to the rear of The pPaddocks and behind properties on Cot Garth Lane. With The Paddocks, these properties are mainly situated east west, but set back behind long rear gardens. Properties along Cot Garth Lane have a north south orientation and are set behind generous front gardens. Grange Farm is located to the southeast of the settlement also facing south just to the west of the River Till.		Not applicable	No	No visibility towards Cottam 1 North Site/Sites due to the extensive property grounds, including long front and rear gardens being fully enclosed with tree cover. The strong riparian vegetation bordering the River Till and large scale agricultural buildings at Grange Farm also provide additional screeening. Scope out.
R67	Moor Farm	Singular building	489888	384235	Cottam 1	80 1	N	n/a VP38	Farmstead occupying a long, wide plot with a single dwelling just off South Lane. The dwelling is located towards the western end of the plot overlooking South Lane and there are other outbuildings and barns to the east and south. The dwelling has an outlook on three sides with the northern boundary enclosed with mature tree cover and hedgerows. The tree cover in the front garden closes down any visibility towards the west but there is a partially open aspect. There		New planting bordering the west of the Cottam 1 North Site/Sites set back from boundary with Moor Farm.	No	Limited visibility to the north and south towards Cottam 1 North Site/Sites.  The mature tree cover in the front garden of the property closes down some views towards the west and further tree cover within the garden to the rear helps to break down visibility towards the east. There is some open visibility towards the west. Planting mitigation would further curtail views both east and west at Year 1 and close down views at Year 15.
									are some mature trees to the west side of South Lane, but the hedgerows are generally open and low-cut.				
R67	Moor Farm	Singular building	489888		High voltage cable corridor and access	13.724693			· ·				
R67 R67	Moor Farm Moor Farm Grange Farm	Singular building Singular building Singular building	489888 489888 491421	384235	High voltage cable corridor and access High voltage cable corridor and access  Cottam 1	13.724693 703.385232 605 I	N	n/a VP18	· ·	Not applicable	Not applicable	No	No visibility towards Cottam 1 North Site/Sites due to the extensive area of large-scale agricultural buildings, including a large collection of barns. The property is also enclosed by strong hedgerows, woodland and tree cover to the north and west boundaries of its garden curtilage. Scope out.
R67	Moor Farm	Singular building	489888	384235 383499	High voltage cable corridor and access	703.385232	N	n/a VP18	hedgerows are generally open and low-cut.  Farmstead occupying a broadly rectangular plot to both sides of the access track with a single dwelling, extensive collection of elongated barns and large-scale agricultural buildings. The dwelling is located towards the northwest part of the plot facing south towards the access track, where there are other outbuildings and barns to the south and east of this. The dwelling has an outlook on four sides with the north and west boundary of the curtilage enclosed with a tall	Not applicable	Not applicable	No	large-scale agricultural buildings, including a large collection of barns. The property is also enclosed by strong hedgerows, woodland and tree cover to
R67	Moor Farm Grange Farm	Singular building Singular building	489888 491421	384235 383499 383499	High voltage cable corridor and access  Cottam 1	703.385232 605 I		n/a VP18	hedgerows are generally open and low-cut.  Farmstead occupying a broadly rectangular plot to both sides of the access track with a single dwelling, extensive collection of elongated barns and large-scale agricultural buildings. The dwelling is located towards the northwest part of the plot facing south towards the access track, where there are other outbuildings and barns to the south and east of this. The dwelling has an outlook on four sides with the north and west boundary of the curtilage enclosed with a tall		Not applicable  Not applicable	No	large-scale agricultural buildings, including a large collection of barns. The property is also enclosed by strong hedgerows, woodland and tree cover to
R67	Moor Farm  Grange Farm  Grange Farm	Singular building Singular building Singular building	489888 491421 491421	38423 <u>5</u> 38349 <u>5</u> 38349 <u>5</u> 383321	High voltage cable corridor and access  Cottam 1  Cottam 1 internal cable corridor	703.385232 605 t 857.254712			Farmstead occupying a broadly rectangular plot to both sides of the access track with a single dwelling, extensive collection of elongated barns and large-scale agricultural buildings. The dwelling is located towards the northwest part of the plot facing south towards the access track, where there are other outbuildings and barns to the south and east of this. The dwelling has an outlook on four sides with the north and west boundary of the curtilage enclosed with a tall shelterbelt, mature tree cover and hedgerows.  Farmstead occupying an elongated plot to the west side of Long Lane with two residential dwellings comprising 'The Farmhouse' and 'Low Farm'. There is also a collection of large-scale agricultural buildings to the south of the plot located between the two dwellings. The Farmhouse is located towards the northern end of the plot with an 'a round' aspect, but with an open focus towards the west. Low Farm is located to the south of the plot surrounded by mature tree and hedgerow cover with agricultural buildings to the north and west. A tributary of the River Till passes north south in a meandering alignment to the west of this location and as clothed in riparian			No	large-scale agricultural buildings, including a large collection of barns. The property is also enclosed by strong hedgerows, woodland and tree cover to the north and west boundaries of its garden curtilage. Scope out.  Limited visibility towards Cottam 1 North Site/Sites due to the distance, the riparian vegetation bordering the tributary of the River Till, the large-scale agricultural buildings, and the mature tree cover within the garden curtilages.
R70 R70	Moor Farm  Grange Farm  Grange Farm  Low Farm	Singular building Singular building Singular building Singular building	491421 491421 493169	383499 383499 383321	High voltage cable corridor and access  Cottam 1  Cottam 1 internal cable corridor  Cottam 1	703.385232 605 I 857.254712	N		Farmstead occupying a broadly rectangular plot to both sides of the access track with a single dwelling, extensive collection of elongated barns and large-scale agricultural buildings. The dwelling is located towards the northwest part of the plot facing south towards the access track, where there are other outbuildings and barns to the south and east of this. The dwelling has an outlook on four sides with the north and west boundary of the curtilage enclosed with a tall shelterbelt, mature tree cover and hedgerows.  Farmstead occupying an elongated plot to the west side of Long Lane with two residential dwellings comprising 'The Farmhouse' and 'Low Farm'. There is also a collection of large-scale agricultural buildings to the south of the plot located between the two dwellings. The Farmhouse is located towards the northern end of the plot with an 'a round' aspect, but with an open focus towards the west. Low Farm is located to the south of the plot surrounded by mature tree and hedgerow cover with agricultural buildings to the north and west. A tributary of the River Till passes north south in a meandering alignment to the west of this location and as clothed in riparian	Not applicable		No No	large-scale agricultural buildings, including a large collection of barns. The property is also enclosed by strong hedgerows, woodland and tree cover to the north and west boundaries of its garden curtilage. Scope out.  Limited visibility towards Cottam 1 North Site/Sites due to the distance, the riparian vegetation bordering the tributary of the River Till, the large-scale agricultural buildings, and the mature tree cover within the garden curtilages.
R70  R70  R71  R72	Grange Farm  Grange Farm  Low Farm	Singular building Singular building Singular building Singular building Singular building	491421 491421 493169 493169 490818	383499 383499 383321 383321	Cottam 1  Cottam 1  Cottam 1  Cottam 1  Cottam 1	703.385232 605 1 857.254712 546 1 956.856037	N N	n/a VP22	Farmstead occupying a broadly rectangular plot to both sides of the access track with a single dwelling, extensive collection of elongated barns and large-scale agricultural buildings. The dwelling is located towards the northwest part of the plot facing south towards the access track, where there are other outbuildings and barns to the south and east of this. The dwelling has an outlook on four sides with the north and west boundary of the curtilage enclosed with a tall shelterbelt, mature tree cover and hedgerows.  Farmstead occupying an elongated plot to the west side of Long Lane with two residential dwellings comprising 'The Farmhouse' and 'Low Farm'. There is also a collection of large-scale agricultural buildings to the south of the plot located between the two dwellings. The Farmhouse is located towards the northern end of the plot with an 'a round' aspect, but with an open focus towards the west. Low Farm is located to the south of the plot surrounded by mature tree and hedgerow cover with agricultural buildings to the north and west. A tributary of the River Till passes north south in a meandering alignment to the west of this location and as clothed in riparian vegetation.  Farmstead occupying a broadly rectangular plot to both sides of the access track, with three residential dwellings comprising 'Hall Farm Cottages', 'Coates Hall' and the 'Groom' residence. There is also a collection of large-scale agricultural buildings to the northwest of the plot located to the west of Hall Farm Cottages. Hall Farm Cottages hall an open outlook towards the east and the 'Groom' residence has an open outlook towards the north over Hall Farm Cottages. Coates Hall is fully enclosed with mature woodland and tree cover with an outlook to the east towards the 'Groom' residence. The Grade I listed	Not applicable  Not applicable  Panels set back from west boundary of the Cottam 1	Not applicable  Not applicable	No	large-scale agricultural buildings, including a large collection of barns. The property is also enclosed by strong hedgerows, woodland and tree cover to the north and west boundaries of its garden curtilage. Scope out.  Limited visibility towards Cottam 1 North Site/Sites due to the distance, the riparian vegetation bordering the tributary of the River Till, the large-scale agricultural buildings, and the mature tree cover within the garden curtilages. Scope out.  Limited visibility towards Cottam 1 North Site/Sites due to the distance, the large-scale agricultural buildings, mature woodland and tree cover within the garden curtilages and the presence of the Grade I listed St Edith's Church to
R70  R70  R71  R71	Grange Farm  Grange Farm  Low Farm  Hall Farm	Singular building Singular building Singular building Singular building Singular building Singular building	491421 491421 491421 493169 493169	383499 383499 383321 383321 383120	High voltage cable corridor and access  Cottam 1  Cottam 1 internal cable corridor  Cottam 1  Cottam 1  Cottam 1	703.385232 605 ( 857.254712 546 ( 956.856037	N N	n/a VP22	Farmstead occupying a broadly rectangular plot to both sides of the access track with a single dwelling, extensive collection of elongated barns and large-scale agricultural buildings. The dwelling is located towards the northwest part of the plot facing south towards the access track, where there are other outbuildings and barns to the south and east of this. The dwelling has an outlook on four sides with the north and west boundary of the curtilage enclosed with a tall shelterbelt, mature tree cover and hedgerows.  Farmstead occupying an elongated plot to the west side of Long Lane with two residential dwellings comprising 'The Farmhouse' and 'Low Farm'. There is also a collection of large-scale agricultural buildings to the south of the plot located between the two dwellings. The Farmhouse is located towards the northern end of the plot with an 'a round' aspect, but with an open focus towards the west. Low Farm is located to the south of the plot surrounded by mature tree and hedgerow cover with agricultural buildings to the north and west. A tributary of the River Till passes north south in a meandering alignment to the west of this location and as clothed in riparian vegetation.  Farmstead occupying a broadly rectangular plot to both sides of the access track, with three residential dwellings comprising 'Hall Farm Cottages', 'Coates Hall and the 'Groom' residence. There is also a collection of large-scale agricultural buildings to the northwest of the plot located to the west of Hall Farm Cottages. Hall Farm Cottages', Coates Hall is fully enclosed with mature woodland and tree cover with an open outlook towards the north over Hall Farm Cottages. Coates Hall is fully enclosed with mature woodland and tree cover with an outlook to the east towards the 'Groom' residence. The Grade I listed St Edith's Church is located to the west of Coates Hall.  Farmstead occupying an irregular rectangular plot to the east side of the B1241 (Normanby Road), with the residential dwelling occupying the southern part of the pl	Not applicable  Not applicable  Panels set back from west boundary of the Cottam 1 North Site/Sites where it forms the boundary with	Not applicable  Not applicable  New planting bordering the west of the Cottam 1 North Site/Sites where it forms the	No	large-scale agricultural buildings, including a large collection of barns. The property is also enclosed by strong hedgerows, woodland and tree cover to the north and west boundaries of its garden curtilage. Scope out.  Limited visibility towards Cottam 1 North Site/Sites due to the distance, the riparian vegetation bordering the tributary of the River Till, the large-scale agricultural buildings, and the mature tree cover within the garden curtilages. Scope out.  Limited visibility towards Cottam 1 North Site/Sites due to the distance, the large-scale agricultural buildings, mature woodland and tree cover within the garden curtilages and the presence of the Grade I listed St Edith's Church to the west of the plot. Scope out.  Visibility to the east towards Cottam 1 North Site/Sites. The mature hedgerow and tree cover to the immediate east boundary of the property curtilage closes down views. Planting mitigation would further curtail views towards the east

	1	1							-		T	T	1	
										Farmstead occupying a rectangular plot to the west side of the B1241				
											Panels set back from west	Name of the second section of the se		
										(Normanby Road), with the residential dwelling occupying the	boundary of the Cottam 1	New planting bordering the		
										northern part of the plot. There is a collection of outbuildings and	North Site/Sites where it	west of the Cottam 1 North		Visibility to the east towards Cottam 1 North Site/Sites. The open park railing
										long barns to the north of the residential dwelling. The dwelling has		Site/Sites where it forms the		and gates to the immediate east boundary of the property curtilage bordering
R74	West Farm	Singular building	488181	383008	Cottam 1	54 N		n/a	VP20	an open aspect to the south, directly overlooking a large garden with	forms the boundary with	boundary with the B1241	No	the B1241 (Normanby Road) allows views across its bounds. Planting
11.74	West i dilli	Siligular bulluling	400101	363006	Cottain 1	J4 IV		11/ 0	VF 20		the B1241 (Normanby		NO	-
										mature trees. There is an open park railing and gated railing entrance	Road) and with East Farm	(Normanby Road) and with		mitigation would curtail views towards the east at Year 1 and help to close
										to the immediate east boundary of the property bordering the west		East Farm to the west side of		down views at Year 15.
	1								1	side of the B1241 (Normanby Road) where open, but oblique visibility	to the west side of the	the road.	1	
										is gained across towards the east.	road.			
										is gained across towards the east.				
R74	West Farm	Singular building	488181	383008	High voltage cable corridor and access	16.437023								
R74	West Farm	Singular building	488181		High voltage cable corridor and access	674.03646								
107-4	Westraini	Singular Salianing	400101	303000	riigii voitage cable corridor and access	074.03040				F				
										Farmstead occupying an almost triangular plot to the south side of				
										Ingham Road, with the residential dwelling occupying the northwest				
										part of the plot, right at the boundary with Ingham Road. There is a				
										collection of large-scale agricultural buildings and long barns to the				
										south of the property. The dwelling has an open aspect to the north				
														Very limited visibility towards Cottam 1 North Site/Sites due to the distance,
R75	Furze Hill	Singular building	490840	382413	Cottam 1	406 N		n/a	VP16	with the front elevation directly overlooking Ingham Road, but with	Not applicable	Not applicable	No	the intervening sub station, the raised levee bordering the River Till and the
		3						•		garden curtilage towards the east. There is a tall dense hedgerow with	,		-	strong field boundary beyond. Scope out.
										mature tree cover to the immediate east boundary of the property.				strong held boundary beyonds scope out.
										The River Till meanders through the landscape to the west with raised				
										levees to both sides and with some riparian vegetation. There is also				
										an electricity sub station directly to the west of the dwelling at the				
										farm entrance.				
R75	Furze Hill	Singular building	490840	382413	Cottam 1 internal cable corridor	917.131057				<u> </u>	<u></u>	<u> </u>	<u></u>	
										Collection of residential dwellings and farmsteads fronting Ingham	Daniela anti di di			
Ī	1								I	Road with a north south aspect. The properties comprise nos. 19 to	Panels set back from	New planting bordering the	I	
Ī	1								I		south and north		I	
Ī	1								I	25 (Flat Topped Houses), No 27 Ingham Road which is a detached	boundary of the Cottam 1	south and north boundary	I	
Ī	1								I	dwelling with stables and riding arena, No 29 Ingham Road which is a	North Site/Sites and	of the Cottam 1 North and	I	
1	1								I	detached cottage, No. 31 Ingham Road which is a cream rendered		the Cottam 1 South	I	Some visibility to the north and south towards the Cottam 1 North and Cottam
R76	Stow Pasture	Group of buildings	489824	382326	Cottam 1	44 N	ı l	n/a	VP13	detached dwelling with outbuildings and 'The Pastures'. The open	Cottam 1 South Site/Sites		No	1 South Site/Sites Site/Sites. Planting mitigation would curtail views towards
1 5		a. aap or ballulliga	.03024	302320	<del>-</del>			, -	125		where they form the		l	
1	1								I	aspect of some properties (19 to 25 and The Pastures) may yield some	boundary with these	the boundary with these	I	the north and south at Year 1 and help to close down views at Year 15.
1	1								I	oblique visibility towards the south from ground floor windows	properties at Stow	properties at Stow Pasture	I	
1	1								I	towards the Cottam South Site/Sites. There may also be views north		to either side of Ingham	I	
Ī	1								I	from first floor windows to the rear of the properties over the Cottam	Pasture to either side of	Road.	I	
1									I	1 North Site/Sites.	Ingham Road.		Ī	
D.7.C	Chaus Bashurr	Canada af hard to	400024	20222	Cattom 1 internal califacture	20.042427				z ivolati ottojottos.	-		1	<del> </del>
K/b	Stow Pasture	Group of buildings	489824		Cottam 1 internal cable corridor	29.810407				+			1	
R76	Stow Pasture	Group of buildings	489824	382326	Cottam 1 internal cable corridor	385.745753								
										Collection of residential dwellings towards the east of Stow at South				
										Drive and School Lane and frontong Ingham Road. Other properties				
									LCC-C-A and	comprise detached dwellings fronting Ingham Road including				Very limited visibility towards Cottam 1 North Site/Sites due to the distance,
R78	Stow	Town or Village	488192	381994	Cottam 1	742 N		n/a			Not applicable	Not applicable	No	
		, and a						·	LCC-C-B	Ashtrees, Charolands, Tarn Howes and also Creek Hill Close to the				the intervening woodlands and the strong field boundaries beyond. Scope out.
										south. There are woodland areas and good tree cover that provides				
										screening to the edge of the settlement.				
R78	Stow	Town or Village	488192	381994	High voltage cable corridor and access	547.039162								
R79	Highfield Farm					569.705145								
K/9	nignilielu ranni	Singular building	487145	381499	High voltage cable corridor and access	509.705145								
										Farmstead occupying a small rectangular plot to the north side of				
										Thorpe Lane, with the residential dwelling occupying the east part of				
R80	The Grange	Singular building	491482	381126	Cottam 1	22 N		n/a	VP11	the plot, right at the boundary with the public bridleway. There is a	Not applicable	Not applicable	No	Derelict building. Scope out.
										collection of large-scale agricultural buildings to the west of the				
										property. This is a derelict building.				
200	TI 0	s: 1 1 11:	404400	201125	0.11 1.11 1.1	000 55 4070			_	property. This is a defence building.				
R80	The Grange	Singular building	491482	381126	Cottam 1 internal cable corridor	803.654073								
										Farmstead occupying a large rectangular plot to the north side of				
										Ingham Road, with the residential dwelling occupying the central part				No visibility towards Cottam 1 North Site/Sites due to the distance, the
R82	Thorpe Lane Farm	Singular building	492875	380821	Cottam 1	574 N		n/a	VP4	of the plot. The dwelling has an open aspect in all directions. There	Not applicable	Not applicable	No	
										are tall dense hedgerows with mature tree cover to all boundaries of				intervening woodlands and the strong field boundaries beyond. Scope out.
										the property.				
										Callantian of maidential duallings are single Clauden Harris	Panels set back from	New planting bordering the		
										Collection of residential dwellings comprising Clandon House,	south boundary of the	south boundary of the		
										Clandon Barn, Westop Cottages, Thorpe House, Cottage and East		Cottam 1 South Site/Sites		
										Cottage. Westop Cottages, Clandon House and Clandon Barn are have				Visibility to the north towards the Cottam 1 North Site/Sites Site/Sites.
R84	Clandon House	Group of buildings	491273	380604	Cottam 1	153 N		n/a	VP5	a north south orientation, witht their rear elevations facing towards		where they forms the	No	Planting mitigation would curtail views at Year 1 and help to close down views
1	1								I	the Cottam 1 South Site/Sites.Thorpe House, Thorpe le Fallows Farm,	boundary with these	boundary with these	I	at Year 15.
1	1								1		properties at Thorpe le	properties at Thorpe le	1	
1	1								I	Cottage and East Cottage all face north towards Thopre Lane and look	Fallows to the north side	Fallows to the north side of	I	
1	1								1	over Westop Cottages, Clandon House and Clandon Barn.	of Thorpe Lane.	Thorpe Lane.	Ì	
											. ,			
R84	Clandon House	Group of buildings	491273	380604	Cottam 1 internal cable corridor	892.137595								
	1									Collection of residential dwellings fronting the A1500 Tillbridge Lane.				
	1								I	Lancaster Farm is located to the south side of Tillbrrdge Lane and	1		I	
	1								I	<del>_</del>	1		I	
	1								I	comprises a dwelling to the northwest of the plot,located	1		I	
Ī	1								I	immediately adjacent to the A1500. To the east there are large-scale	1		I	
Ī	1								I	agricultural buildings, which occupy the majority of the plot. There is	1		I	No visibility to words Cathons & North City City day of the City
R87	Lancaster Farm	Group of buildings	490004	379986	Cottam 1	633 N	ı l	n/a	VP8	also dense tree and shrub cover bordering Tillbridge Lane. Other	Not applicable	Not applicable	No	No visibility towards Cottam 1 North Site/Sites due to the distance, the
1	1	a. aap or ballulliga	.55504	3.3300	<del>-</del>	033		, -	1				l	intervening woodlands and the strong field boundaries beyond. Scope out.
1	1								I	properties to the north side of Tillbridge Lane include Ivy Cottage and	1		I	
Ī	1								I	Aunsby House, which are orientated north south with long rear	1		I	
Ī	1								I	gardens and a good level of boundary vegetation. Thorpe Lane also	1		I	
Ī	1								I	has a strong hedgerow to its west side, which helps curtail views	1		I	
Ī	1								I	towards the north.	1		I	
-	1	+	<del>                                     </del>		<del> </del>		-		+				<del> </del>	
1	1								I	Farmstead to the south side of the A1500 (Till Bridge Lane with large	1		I	
									I	scale agricultural buildings. There are business premises to the north	1	1	I	
		i l	400073	270001	Cottom 1	000			VD2	side of the A1500, including Gelder Group and Redline BSS. The River	Not applicable	Not applicable	No	No visibility towards Cottam 1 North Site/Sites due to the distance, the
DOO	Tillbridge Form	Cinquian building	490973	3/9691	Cottam 1	966			VP3	Til is located to the west and supports some tree cover. There is also	Not applicable	Not applicable	No	intervening woodlands and the strong field boundaries beyond. Scope out.
R88	Tillbridge Farm	Singular building							I		1		I	5 sope out
R88	Tillbridge Farm	Singular building			i I				I	strong tree cover surrounding the plots on both sides of Till Bridge	1		Ī	
R88	Tillbridge Farm	Singular building			l I				-	Lane.	1	Ĩ		
				204.402	High voltage cable servides and servi-									
R91	Manor Farm	Group of buildings	486241		High voltage cable corridor and access	52			-					
R91 R92	Manor Farm West View Farm	Group of buildings Singular building	486241 485905	381019	High voltage cable corridor and access	354								
R91 R92 R93	Manor Farm West View Farm Home Farm	Group of buildings Singular building Singular building	486241 485905 485837	381019 381163	High voltage cable corridor and access High voltage cable corridor and access	354 298								
R91 R92 R93 R93	Manor Farm West View Farm Home Farm Home Farm	Group of buildings Singular building Singular building Singular building	486241 485905 485837 485837	381019 381163 381163	High voltage cable corridor and access High voltage cable corridor and access Shared cable corridor and access	354 298 934								
R91 R92 R93	Manor Farm West View Farm Home Farm	Group of buildings Singular building Singular building	486241 485905 485837	381019 381163 381163	High voltage cable corridor and access High voltage cable corridor and access	354 298								
R91 R92 R93 R93	Manor Farm West View Farm Home Farm Home Farm	Group of buildings Singular building Singular building Singular building	486241 485905 485837 485837	381019 381163 381163 381438	High voltage cable corridor and access High voltage cable corridor and access Shared cable corridor and access	354 298 934								
R91 R92 R93 R93 R94 R94	Manor Farm West View Farm Home Farm Home Farm Unnamed Unnamed	Group of buildings Singular building Singular building Singular building Group of buildings Group of buildings	486241 485905 485837 485837 485690 485690	381019 381163 381163 381438 381438	High voltage cable corridor and access High voltage cable corridor and access Shared cable corridor and access High voltage cable corridor and access Shared cable corridor and access	354 298 934 417 693								
R91 R92 R93 R93 R94 R94	Manor Farm West View Farm Home Farm Home Farm Unnamed Unnamed Ardsley Cottage	Group of buildings Singular building Singular building Singular building Group of buildings Group of buildings Group of buildings	486241 485905 485837 485837 485690 485690 485667	381019 381163 381163 381438 381438 381499	High voltage cable corridor and access High voltage cable corridor and access Shared cable corridor and access High voltage cable corridor and access Shared cable corridor and access High voltage cable corridor and access	354 298 934 417 693 368								
R91 R92 R93 R93 R94 R94 R95	Manor Farm West View Farm Home Farm Home Farm Unnamed Ardsley Cottage Ardsley Cottage	Group of buildings Singular building Singular building Singular building Singular building Group of buildings Group of buildings Group of buildings Group of buildings	486241 485905 485837 485837 485690 485690 485667	381019 381163 381163 381438 381438 381499 381499	High voltage cable corridor and access High voltage cable corridor and access Shared cable corridor and access High voltage cable corridor and access Shared cable corridor and access High voltage cable corridor and access Shared cable corridor and access	354 298 934 417 693 368 649								
R91 R92 R93 R93 R94 R94 R95 R95	Manor Farm West View Farm Home Farm Unnamed Unnamed Ardsley Cottage Ardsley Cottage Marton Grange	Group of buildings Singular building Singular building Singular building Group of buildings	486241 485905 485837 485837 485690 485690 485667 485667 485137	381019 381163 381163 381438 381438 381499 381499 381699	High voltage cable corridor and access High voltage cable corridor and access Shared cable corridor and access High voltage cable corridor and access Shared cable corridor and access High voltage cable corridor and access Shared cable corridor and access High voltage cable corridor and access High voltage cable corridor and access	354 298 934 417 693 368 649								
R91 R92 R93 R93 R94 R94 R95 R95	Manor Farm West View Farm Home Farm Home Farm Unnamed Ardsley Cottage Ardsley Cottage	Group of buildings Singular building Singular building Singular building Singular building Group of buildings Group of buildings Group of buildings Group of buildings	486241 485905 485837 485837 485690 485690 485667	381019 381163 381163 381438 381438 381499 381499 381699	High voltage cable corridor and access High voltage cable corridor and access Shared cable corridor and access High voltage cable corridor and access Shared cable corridor and access High voltage cable corridor and access Shared cable corridor and access	354 298 934 417 693 368 649 31								
R91 R92 R93 R93 R94 R94 R95 R95	Manor Farm West View Farm Home Farm Unnamed Unnamed Ardsley Cottage Ardsley Cottage Marton Grange	Group of buildings Singular building Singular building Singular building Group of buildings	486241 485905 485837 485837 485690 485690 485667 485667 485137	381019 381163 381163 381438 381438 381499 381499 381699	High voltage cable corridor and access High voltage cable corridor and access Shared cable corridor and access High voltage cable corridor and access Shared cable corridor and access High voltage cable corridor and access Shared cable corridor and access High voltage cable corridor and access High voltage cable corridor and access	354 298 934 417 693 368 649								

							1	1	
R97	Poplar Farm	Singular building	484639	381529 High voltage cable corridor and access	430				
R97	Poplar Farm	Singular building	484639	381529 Shared cable corridor and access	38				
R98	Marton	Town or Village	484101	381893 Abnormal loads access	135				
R98	Marton	Town or Village	484101	381893 High voltage cable corridor and access	958				
R98	Marton	Town or Village	484101	381893 Shared cable corridor and access	282				
R99	Brampton Grange	Singular building	484348	380978 High voltage cable corridor and access	987	•			
R99	Brampton Grange	Singular building	484348	380978 Shared cable corridor and access	286				
R100	Unnamed	Group of buildings	484139	381191 Abnormal loads access	795				
R100	Unnamed	Group of buildings	484139	381191 Shared cable corridor and access	65				
R101	Coates Farm	Group of buildings	482000	381317 Shared cable corridor and access	442				
R102	Cottam	Town or Village	481859	380027 Shared cable corridor and access	77				
R103	Cow Pastures	Singular building	480610	380664 Shared cable corridor and access	311				
R104	Westbrecks Farm	Group of buildings	480168	380034 Abnormal loads access	1,000				
R104	Westbrecks Farm	Group of buildings	480168	380034 Shared cable corridor and access	227				
R105	East End Farm	Group of buildings	480283	378562 Shared cable corridor and access	472				



# Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.3.1: Residential Receptors – Residential Cumulative [Reference: EN010133/APP/C6.3.8.3.3.1.2] January 2023

Viewpoint	Location	Bumble Bee Farm	Field Farm	Gate Burton Energy Farm	High Marnham Solar	Tillbridge Solar	West Burton	Potential Intervisibility	Potential Intervisibility Justification
R03 R07	Mount Pleasant Farm Grange Farm								Already Scoped Out Already Scoped Out
R08	Dring Lane								Already Scoped Out
R09	Cold Harbour								Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
R10	Cold Harbour	N	N	Y	N	Y	N		Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
R11 R13	Blenheim Farm Blue Bell Farm	N	N	N	N	Y	N		Already Scoped Out  Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
R13	Blue Bell Farm	N	N	N	N	Y	N		Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
R15	Sewage Works								Already Scoped Out
R18 R18	Southorpe Farm Southorpe Farm								Already Scoped Out Already Scoped Out
R19	Unnamed	Y	N	Υ	N	Υ	Y		Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
R19	Unnamed	Y	N	Y	N	Y	Y		Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
R19	Unnamed	Y	N	Y	Ν	Y	Y		Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
R20	The Fields Farm	N	N	Y	N	Y	N		Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
R20	The Fields Farm	N	N	Y	N	Y	N		Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
R20	The Fields Farm	N	N	Y	N	Y	N		Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
R21 R21	Grange Farm Grange Farm								Already Scoped Out Already Scoped Out
R21	Grange Farm	N	N	Y	N	Υ	Y		Already Scoped Out  Cottam 3a and 3b are not visibile therefore no potential
R22	Top Farm	N	N	Y	N	Y	Y		cumulative intervisibility.  Cottam 3a and 3b are not visibile therefore no potential
R22	Top Farm	N	N	Y	N	Y	Y		cumulative intervisibility.  Cottam 3a and 3b are not visibile therefore no potential
R22	Top Farm	N	N	Y	N	Y	Y		cumulative intervisibility.  Cottam 3a and 3b are not visibile therefore no potential
R22	Top Farm	N	N	Y	N	Y	Y		cumulative intervisibility.  Cottam 3a and 3b are not visibile therefore no potential
R23	Blyton	N	N	N	N	Y	N		cumulative intervisibility.  Cottam 3a and 3b are not visibile therefore no potential
R25	Glebe Farm Glebe Farm	N	N	N	N	Y	N		cumulative intervisibility.  Cottam 3a and 3b are not visibile therefore no potential
R25	Glebe Farm	N	N	N	N	Y	N		cumulative intervisibility.  Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
R25	Glebe Farm	N	N	N	N	Y	N		Cottam 3a and 3b are not visibile therefore no potential
R26	Bonsdale Farm								cumulative intervisibility.  Already Scoped Out
R26 R28	Bonsdale Farm Pilham								Already Scoped Out Already Scoped Out
R30	Dunstall								Already Scoped Out
R31 R32	Gilby Aisby								Already Scoped Out Already Scoped Out
R33	Aisby  The Cottage	N N	N N	Y	N	Y	N N		Already Scoped Out  Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor R33 at The Cottage, the receptor is approximately 6.8 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.7 km away from the closest Tillbridge Solar site. However, built form associated with Corringham closes down views to the development and existing vegetation associated with A631 limits views into the development sites. No views of cumulative developments - Scope Out.
R33	The Cottage								significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor R33 at The Cottage, the receptor is approximately 6.8 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.7 km away from the closest Tillbridge Solar site. However, built form associated with Corringham closes down views to the development and existing vegetation associated with A631 limits views into the development sites. No views of cumulative developments - Scope Out.
R34	Yawthorpe Hall Farm & Old Farm	N	N	Y	N	Y	Y		Already Scoped Out  Cottam 1 is not visibile therefore no potential
CCA	Indii Fatifi & Oid Farm	N	N	Y	N	Y	Y		cumulative intervisibility.  Cottam 1 is not visibile therefore no potential
R35	Hall Farm & Old Farm	1	l	Î.	İ	İ	İ		cumulative intervisibility.

R36	Corringham Grange Farm	N	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor R36 at Corringham Grange Farm, the receptor is approximately 6.5 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.5 km away from the closest Tillbridge Solar site however, built form associated with Corringham closes down views to the development and existing vegetation associated with A631 limits views into the development sites. No views of cumulative developments - Scope Out.
R36	Corringham Grange Farm	N	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor R36 at Corringham Grange Farm, the receptor is approximately 6.5 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.5 km away from the closest Tillbridge Solar site however, built form associated with Corringham closes down views to the development and existing vegetation associated with A631 limits views into the development sites. No views of cumulative developments - Scope Out.
R36	Corringham Grange Farm	N	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor R36 at Corringham Grange Farm, the receptor is approximately 6.5 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.5 km away from the closest Tillbridge Solar site however, built form associated with Corringham closes down views to the development and existing vegetation associated with A631 limits views into the development sites. No views of cumulative developments - Scope Out.
D20	Carringham							Already Separat Out
R38 R39	Corringham Corringham Windmill							Already Scoped Out Already Scoped Out
R39	Corringham Windmill							Already Scoped Out
R40	Magin Moor Cottages							Already Scoped Out
R40 R44	Magin Moor Cottages Grange Cottage							Already Scoped Out Already Scoped Out
R44 R45	Springthorpe Grange							Aiready Scoped Out Already Scoped Out
R46	Unnamed							Already Scoped Out
R50	Low Field Farm							Already Scoped Out
R51	Westlands Farm							Already Scoped Out
R52	Low Farm							Already Scoped Out
R53 R54	Glentworth Grange Spitals Farm							Already Scoped Out Already Scoped Out
		N	N	Υ	N	Y	Y	Cottam 1 is not visibile therefore no potential
R60	Glebe Farm							cumulative intervisibility.
R60	Glebe Farm	N N	N N	Y	N N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Though the cumulative developments cover a
R61	Greystones Farm							significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor R61 at Greystones Farm, the receptor is approximately 5.8 km to Gate Burton Energy Farm and approximately 7.2 km away from the West Burton Site and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.5 km away from the closest Tillbridge Solar site however, dense vegetation assoicated with tributaries in nearby fields closes down views and densely populated hedgerow situated in front of receptor R61 limits views into the development site. No views of cumulative developments - Scope Out.

	T	N	N	Y	N	Υ	Y	Though the cumulative developments cover a
R61	Greystones Farm	2	N	'	N .	•		significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor R61 at Greystones Farm, the receptor is approximately 5.8 km to Gate Burton Energy Farm and approximately 7.2 km away from the West Burton Site and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.5 km away from the closest Tillbridge Solar site however, dense vegetation assoicated with tributaries in nearby fields closes down views and densely populated hedgerow situated in front of receptor R61 limits views into the development site. No views of cumulative developments - Scope Out.
R62	Turpin Farm	N	N	Y	N	Υ	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor R62 at Turpin Farm, the receptor is approximately 5.8 km to West Burton and 4 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.3 km away from the closest Tillbridge Solar site. However, existing vegetation associated with Willingham Road as well as Fillingham Low Wood closes down views into the development sites. No views of cumulative developments - Scope Out.
R62	Turpin Farm	N	N	Y	N	Y	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor R62 at Turpin Farm, the receptor is approximately 5.8 km to West Burton and 4 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.3 km away from the closest Tillbridge Solar site. However, existing vegetation associated with Willingham Road as well as Fillingham Low Wood closes down views into the developments ites. No views of cumulative developments - Scope Out.
R62	Turpin Farm	N	N	Y	N	Y	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor R62 at Turpin Farm, the receptor is approximately 5.8 km to West Burton and 4 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.3 km away from the closest Tillbridge Solar site. However, existing vegetation associated with Willingham Road as well as Fillingham Low Wood closes down views into the development sites. No views of cumulative developments - Scope Out.
R63A	North Farm	N	Y	Y	N	Y	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor R63A at North Farm, the receptor is approximately 14.6 km to Field Farm, 6.5 km to West Burton and 5.4 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 0.9 km away from the closest Tillbridge Solar site. However, dense vegetation associated with nearby fields closes down views and densely populated hedgerow situated in front of receptor R63A limits views into the development site. No views of cumulative developments - Scope Out.

R63A	North Farm	N	Y	Y	N	Υ	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor R63A at North Farm, the receptor is approximately 14.6 km to Field Farm, 6.5 km to West Burton and 5.4 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 0.9 km away from the closest Tillbridge Solar site. However, dense vegetation associated with nearby fields closes down views and densely populated hedgerow situated in front of receptor R63A limits views into the development site. No views of cumulative developments - Scope Out.
R63B	Side Farm	N	N	Y	N	Y	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor R36B at Side Farm, the receptor is approximately 5.9 km to West Burton and 4.7 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.4 km away from the closest Tillbridge Solar site. However, dense vegetation associated with nearby fields and existing vegetation associated with Willingham Road closes down views into the development sites. No views of cumulative developments - Scope Out.
R63B	Side Farm	N	N	Y	N	Y	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor R36B at Side Farm, the receptor is approximately 5.9 km to West Burton and 4.7 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.4 km away from the closest Tillbridge Solar site. However, dense vegetation associated with nearby fields and existing vegetation associated with Willingham Road closes down views into the development sites. No views of cumulative developments - Scope Out.
R64	Slate House Farm							Already Scoped Out
R64	Slate House Farm	N	N	Y	N	Y	Y	Already Scoped Out  Cottam 1 is not visibile therefore no potential
R65	Lowfield Farm							cumulative intervisibility.
R65	Lowfield Farm	N	N	Υ	N	Υ	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
R65	Lowfield Farm	N	N	Υ	N	Υ	Y	Cottam 1 is not visibile therefore no potential
R66	Willingham by Stow							cumulative intervisibility.  Already Scoped Out
R67	Moor Farm	N	N	Y	N	Y	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor R67 at Moor Farm, the receptor is approximately 5.3 km to West Burton and therefore has no potential intervisibility. Similarly, the receptor is approximately 2.8 km to Gate Burton Energy Farm however dense vegetation assoicated with nearby fields, tributaries and existing vegetation associated with Stone Lane, South Pits Lane and Stow Lane close down views to development sites. Receptor R67 is also approximately 1.5 km away from the closest Tillbridge Solar site. However, dense vegetation associated with nearby fields, tributaries and Fillingham Low Wood closes down views to the development. No views of cumulative developments - Scope Out.

	hough the cumulative developments cover a
	gnificant surface area and therefore have
	xtensive zones of theoretical visibility, with the
	ase of ground-mounted solar panels it should be
	oted that with effective screening and site-specific
	opgraphy the area of theoretical visibility could be
	ero. Specifically with receptor R67 at Moor Farm,
l l l l l l l l l l l l l l l l l l l	ne receptor is approximately 5.3 km to West
	urton and therefore has no potential intervisibility.
	imilarly, the receptor is approximately 2.8 km to
	ate Burton Energy Farm however dense
R67 Moor Farm ve	egetation assoicated with nearby fields, tributaries
	nd existing vegetation associated with Stone Lane,
	outh Pits Lane and Stow Lane close down views to
	evelopment sites. Receptor R67 is also
	pproximately 1.5 km away from the closest
	illbridge Solar site. However, dense vegetation
	ssociated with nearby fields, tributaries and
	Illingham Low Wood closes down views to the
de	evelopment. No views of cumulative
de	evelopments - Scope Out.
N N Y N Y T	hough the cumulative developments cover a
	gnificant surface area and therefore have
	xtensive zones of theoretical visibility, with the
	ase of ground-mounted solar panels it should be
	oted that with effective screening and site-specific
	opgraphy the area of theoretical visibility could be
	ero. Specifically with receptor R67 at Moor Farm,
	ne receptor is approximately 5.3 km to West
	urton and therefore has no potential intervisibility.
	imilarly, the receptor is approximately 2.8 km to
	ate Burton Energy Farm however dense
R67 Moor Farm ve	egetation assoicated with nearby fields, tributaries
	nd existing vegetation associated with Stone Lane,
	outh Pits Lane and Stow Lane close down views to
	evelopment sites. Receptor R67 is also
	pproximately 1.5 km away from the closest
	illbridge Solar site. However, dense vegetation
	ssociated with nearby fields, tributaries and
	Illingham Low Wood closes down views to the
de de	evelopment. No views of cumulative
de	evelopments - Scope Out.
	·
R70 Grange Farm	Already Scoped Out
R70 Grange Farm	Already Scoped Out  Already Scoped Out
R71 Low Farm	Already Scoped Out
R71 Low Farm	Already Scoped Out
R72 Hall Farm	Already Scoped Out
R73 East Farm	Already Scoped Out
R73 East Farm	Already Scoped Out
R73 East Farm	Already Scoped Out
R74 West Farm	Already Scoped Out
R74 West Farm	Already Scoped Out
R74 West Farm	Already Scoped Out
R75 Furze Hill Survey S	Already Scoped Out
R75 Furze Hill	Already Scoped Out
R76 Stow Pasture	Already Scoped Out
R76 Stow Pasture	Already Scoped Out
R76 Stow Pasture	Already Scoped Out
R78 Stow	Already Scoped Out
	Already Scoped Out
R78 Stow	Alara I. Sarra I.O. I
R79 Highfield Farm	Already Scoped Out
R79         Highfield Farm           R80         The Grange	Already Scoped Out
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# Residential Receptor - R33 / The Cottage

#### **Baseline Context:**

Two story dwelling situated to the north of Corringham Grange Farm within an elongated plot. The main aspect of the dwelling is facing south over lawned gardens with some tree cover to the west and south (closer to the property). There are field hedgerows to the north comprising a double hedgerow (running east west) and a further hedgerow running north south to the west of the access track that serves both this property and Corringham Grange Farm.

**Type:** Singular building

**Distance to Cottam Sites**: 53m to Cottam 2

**Closest settlement:** Corringham at about 85m southwest

Nearest Viewpoint/s: VP48, VP49 and VP54

## **Description of Receptor:**

The principal ground floor windows face south over lawned gardens across an area of trees and shrubs. The secondary ground floor north facing windows look towards the rear garden, garage and outbuildings with a track and field hedgerow beyond. The east and west gables have no principal outlook with the main focus being towards a parking area and a very narrow side section to the garden.

The principal first floor windows face south over lawned gardens across areas of trees and shrubs and then over the surrounding arable fields. The first floor north facing windows look over the rear garden, garage and outbuildings with a track, field hedgerow and then the arable landscape beyond. The east and west gables have no principal outlook from the first floor.

The views are influenced by the presence of the south facing lawned garden, which is the main focus, being an attractive outlook and a long sunny plot. The other views offer some interesting features locally, but the more invigorating views towards the east and west are not available due to lack of windows and outlook. Tree cover is present within the garden area and mainly located to the south and west of the dwelling. The surrounding arable land use is intensively managed with few features, but the presence of far-reaching views to the south adds some interest.

Overall, the views from the first-floor principle south facing elevation are likely to capture the main visual interest over the surrounding landscape towards Springthorpe and Heapham, but Corringham Grange Farm would occupy the foreground of the view. The ground floor principal windows are likely to capture immediate south facing views into the garden of the property.

## Sensitivity: High

## **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





# Residential Receptor - R33 / The Cottage

**Construction Magnitude of Change** 

# The south facing first floor outlook would be significantly affected, but the presence of Corringham Grange Farm would foreshorten these views and provide some filtering of the works. There is also an area that would be absent from future panels between the southern end of the garden to The Cottage and the northern end of the plot to Corringham Grange Farm. The north facing first floor windows would also experience a narrow and framed section of construction due to the small Site area on this aspect. The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be evident from the first-floor outlook, but the ground floor would benefit from the intervening hedgerows and tree and shrub cover within the garden. During the latter part of the construction stage, views would become available of the elevated activities above the garden hedgerows. Due to the presence of tree cover in the garden, the works would benefit from screening such that these activities would be experienced over a filtered proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a proportion of the view framed by the first-floor windows and be a notable feature. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact. The intervening garden to the south, the garage, and outbuildings to the north and the presence of Corringham Grange would also assist with mitigation. There would not be a fundamental change to the surroundings to the northwest of the property.

#### **Construction Access**

Throughout the construction stage the Residential receptor will be affected due to the close proximity of the receptor and the proposed access track that connects towards field H5 at Cottam 2 Site.

#### **Cable Route Corridor**

Residential receptor R33 is within 500m Cable Route Corridor Study Area. There are potential views of the cable route.

**Substations** 

# **Operation Magnitude of Change (Year 1)**

The principal first floor south facing windows would experience views over the area of panels, but their presence would be filtered by the influence of Corringham Grange Farm in the foreground and panels are also absent from area between The Cottage and Corringham Grange Farm.

The principal ground floor south facing windows would experience limited views of the panels due to the intervening garden and associated trees and shrubs.

The first floor north facing windows look over the rear garden and the garage and this is likely to filter the views of the panels. The area of panels to the north is a shorter expanse compared to the other areas to the east and west.

The ground floor north facing windows look towards the rear garden and the garage and are unlikely to experience views of the panels.

The east and west gables have no principal outlook and so views of the panels are unlikely.

The experience of the views over the south facing lawned garden, are unlikely to be significantly affected, remaining as an attractive outlook and a long sunny plot. The presence of far-reaching views over the surrounding landscape towards Springthorpe and Heapham would be significantly affected with the panel areas in the foreground, the views towards the panel areas would be oblique where the majority of the foreground is occupied by the presence of Corringham Grange Farm and an area where panels are absent between the two properties. Views towards the new substation would be at a tight oblique angle where the foreground is occupied by the presence of existing tree cover.

# Mitigation (Operation Magnitude of Change at Year 15)

The first detailed designs were produced in tandem with consultation with residential property owners where this was requested by the owner. This consultation included both site and desk-based work to determine any direct impacts and suitable mitigation measures. Specific mitigation measures applicable to R33 are set out below:

The requirement for mitigation relates to visibility to the north, south, west, and east over the Cottam 2 Site from the first floor of the property, where the windows are mainly south focused.

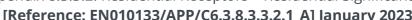
To the north and east aspect of the property, there would be the addition of native shelter belt/woodland planting. This woodland planting is likely to reach a maximum height of 7.5m at Year 15.

To the west aspect of the property, there would be a proposed native hedge with irregularly spaced hedgerow trees. This hedgerow planting is likely to reach a maximum height of 3.5m at Year 15 and will ultimately be allowed to grow out to 5m

To the south aspect of the property, there would be an area of proposed flower rich pollinator mix grassland. There would also be a proposed native hedge with irregularly spaced hedgerow trees. This hedgerow planting is likely to reach a maximum height of 3.5m at Year 15 and will ultimately be allowed to grow out to 5m.

All planting areas would be offset to a maximum of 50m from the property boundary.

# **Decommissioning Magnitude** of Change





	This residential receptor is within the 2km Study Areas for the Cottam 2 substation. There will be views of the substation site to southeast across the field.			
Magnitude	Medium	Medium	Low	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor-Moderate <b>Not Significant</b>	Minor Not Significant

In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
The residential receptor will be affected by the close proximity of the access track that connects	Fabric of the Landscape
towards the field H5 at the Cottam 2 Site. The receptor is also within the 500m Cable Route Corridor Study Area.	There would not be the removal of or changes in individual elements or features of the landscape within the changes in individual elements or features of the landscape within the changes in individual elements or features of the landscape within the changes in individual elements or features of the landscape within the changes in individual elements or features of the landscape within the changes in individual elements or features of the landscape within the changes in individual elements or features of the landscape within the changes in individual elements or features of the landscape within the changes in individual elements or features of the landscape within the changes in individual elements or features of the landscape within the changes in the landscape within the changes in the landscape within the changes in the landscape within the changes in the landscape within the changes in the landscape within the changes in the landscape within the changes in the landscape within the changes in the landscape within the changes within the changes in the landscape within the changes within the change
There is no Intervisibility between the Cottam 1, 2 and 3a and 3b Sites and therefore no in-	There would be the introduction of new elements and features comprising the solar panel areas and the substa within the character area.
combination effects between the Sites.	Aesthetic Aspects of the Landscape
In terms of the combined effects of dust and noise and visual effects, there would be views of the construction works from this viewpoint, but no visibility of the construction access, the Cable Route	Refer to Figure <b>8.15.2.2 [C6.4.8.15.2.2]</b> which shows that with the Cottam 2 Site, cumulative visibility with the curdevelopments would not be experienced across the majority of the 5km study area. This is due to the distance,
Corridor and even though the viewpoint is within the 2km Study Area for the Cottam 1 Substation, there would be no intervisibility at this location.,	intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and buil also curtail cumulative visibility.
There is potential for significant effects at the construction stage from the activities during site preparation / enabling works, construction, and commissioning with effects such as construction	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotta Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads,	This ruge solar. This cumulative visibility is set out in further detail within the following figures.
and the visual intrusion of plant and machinery on site.	Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8
	Overall Landscape Character and Visual Amenity
<u>Sequential Frequent Visibility</u> Not Applicable.	Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas ret strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expanding the contrast of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas ret
Sequential Occasional Visibility	landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor rowest and a more strategic road network north to south. These relevant characteristics of the landscape have so
The south facing (first floor outlook) would be significantly affected by the Cottam 2 Site in its own	accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam
right at the construction and operation stages, but the presence of Corringham Grange Farm would	would not alter the overall character of the landscape within the Unwooded Vales Character Area.
foreshorten these views and provide some filtering of the works. There is also an area that would be absent from future panels between the southern end of the garden to The Cottage and the northern	
end of the plot to Corringham Grange Farm. The north facing first floor windows would also	
experience a narrow and framed section of construction and operation stages due to the small Site	
area on this aspect.	
In Combination	
From the south facing elevation (first floor outlook) only one site (Cottam 2) would be within the	
observers arc of vision at the same time without moving their head, despite there being two other	
cumulative sites (Cottam 3a and 3b) that would potentially be within the observers arc of vision.	
No cumulative effects.	
In succession	





	Within a short time lapse, when moving to the north facing elevation (first floor outlook) of the property, two cumulative sites (Cottam 3a and 3b) would be within the observers arc of vision, but they would not be experienced in combination with the Cottam 2 Site/Sites due to the distance, the intervening settlement of Aisby and hedgerow trees bordering the fields and the minor road network. The collection of small woodlands (including Top Wood, Big Wood and Oak Wood) are also likely to curtail a significant level of visibility in this direction in addition to the other hedgerows and tree cover within the landscape.  No Cumulative Effects	
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Negligible Not Significant

[Reference: EN010133/APP/C6.3.8.3.3.2.2] January 2023

# **Residential Receptor - R36 / Corringham Grange Farm**

#### **Baseline Context:**

Two story dwelling situated to the south of 'The Cottage' within a broadly rectangular plot. The main aspect of the dwelling is facing south over lawned gardens with some tree cover to the west and southeast (closer to the property) and further tree cover and hedgerows defining the domestic curtilage to the west, south and east. There are field hedgerows to the southeast comprising a double hedgerow (running north south) defining the access track that serves both this property and 'The Cottage' and a further hedgerow running east west to the south of the property. To the north, the majority of the plot is occupied by large-scale agricultural buildings and to the east there is a small area of woodland.

**Type:** Singular building

**Distance to Cottam Sites**: 71m to Cottam 2

Closest settlement: Corringham at about 70m west

**Nearest Viewpoint:** VP48, VP49 and VP54

## **Description of Receptor:**

The principal ground floor windows face south over lawned gardens towards the southern boundary hedge framed by an area of trees and shrubs to each side. The secondary ground floor north facing windows look towards a collection of large-scale agricultural buildings. The east gable at ground floor has an outlook over the parking court and the west gable has an outlook over a wide side section to the garden with a collection of trees and shrubs.

The principal first floor windows face south over lawned gardens across the southern boundary hedgerow framed by an area of trees and shrubs to each side and then the views extend over the surrounding arable fields. The first floor north facing windows look over the collection of large-scale agricultural buildings. The east gable at first floor has an outlook over the parking court and then towards the arable landscape beyond. The west gable has an outlook over a wide side section to the garden with a collection of trees and shrubs, and then towards the arable landscape beyond.

The views are influenced by the presence of the south facing lawned garden, which is the main focus, being an attractive outlook and a long sunny plot. The other views offer some interesting features locally, but the more invigorating views towards the east and west are screened and filtered by intervening trees and woodland to the immediate east and west of the property. Tree cover is present within the garden area and mainly located to the east and west of the dwelling. The surrounding arable land use is intensively managed with few features, but the presence of far-reaching views to the east, west and south adds some interest.

Overall, the views form the first-floor principle south facing elevation are likely to capture the main visual interest over the surrounding landscape towards Springthorpe and Heapham, and Corringham Windmill could form a feature of the view. The ground floor principal windows are likely to capture immediate south facing views into the garden of the property. The location offers some interesting features locally, but with more invigorating views out towards the surrounding landscape, which is large scale and exposed. The tree cover is limited, the hedgerows are cut back, and the arable land use is intensively managed, but the presence of far-reaching views adds some stimulus.

**Sensitivity:** *High* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





# Residential Receptor - R36 / Corringham Grange Farm

# Construction Magnitude of Change Operation Magnitud

The south facing first floor outlook would be significantly affected, but the presence of intervening hedgerows and vegetation within the front garden would help provide some filtering of the works. The north facing first floor windows would also experience a narrow section of construction due to the small Site area on this aspect compared to the eastern aspect. The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the substation, solar panel areas and associated infrastructure and inverters would be evident from the first-floor outlook, but the ground floor would benefit from the intervening hedgerows and tree and shrub cover within the garden, and also the area of small woodland outside the garden to the east of the access track that serves the property. During the latter part of the construction stage, views would become available of the elevated activities above the garden hedgerows. Due to the presence of tree cover in the garden, the works would benefit from screening such that these activities would be experienced over a filtered proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a proportion of the view framed by the first-floor windows and be a notable feature. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact. The intervening garden to the south, the large-scale agricultural buildings to the north and the presence of The Cottage would also assist with mitigation. There would not be a fundamental change to the surroundings to the west of the property.

# **Operation Magnitude of Change (Year 1)**

The principal first floor south facing windows would experience views over the area of panels, but their presence would be filtered by the influence of garden planting in the foreground. There would also be oblique views towards the substation, but this is likely to be mitigated by the presence of the foreground trees and woodland just outside the garden area.

The principal ground floor south facing windows would experience limited views of the panels and substation due to the intervening garden and associated trees and shrubs and the southern boundary hedgerow.

The first floor north facing windows look over the large-scale agricultural buildings and this is likely to screen the views of the panels.

The ground floor north facing windows look towards the large-scale agricultural buildings and are unlikely to experience views of the panels.

The east and west gables have intervening garden buildings and tree and shrub cover and so views of the panels are unlikely.

The experience of the ground floor views over the south facing lawned garden, are unlikely to be significantly affected, remaining as an attractive outlook and a long sunny plot. The presence of farreaching views over the surrounding landscape towards Springthorpe and Heapham would be significantly affected with the panel areas in the foreground and the new substation to the east of the property. The views towards the panel areas would be direct but the views towards the substation would be at a tight oblique angle where the foreground is occupied by the presence of existing tree cover.

# Mitigation (Operation Magnitude of Change at Year 15)

The first detailed designs were produced in tandem with consultation with residential property owners where this was requested by the owner. This consultation included both site and desk-based work to determine any direct impacts and suitable mitigation measures. Specific mitigation measures applicable to R36 are set out below:

The requirement for mitigation relates to visibility to the south, west and east over the Cottam 2 Site from the first floor of the property, where the windows are mainly south focused.

To the north aspect of the property, there would be the addition of a proposed native hedge with irregularly spaced hedgerow trees. This hedgerow planting is likely to reach a maximum height of 3.5m at Year 15 and will ultimately be allowed to grow out to 5m.

To the south of the property, there would be a short area of panels with East Lane beyond. The mitigation would include for an area of grassland and a proposed native hedge with irregularly spaced hedgerow trees. This hedgerow planting is likely to reach a maximum height of 3.5m at Year 15 and will ultimately be allowed to grow out to 5m.

To the east of the property, existing hedgerows, trees, and woodland would be retained. There would also be an area of proposed native shrub planting to the southwest of the new substation to supplement the area of existing vegetation.

To the west of the property, there would be a short area of panels with views mainly focused on the woodlands at Old Hall and Hall Farm. The mitigation would include for an area of new grassland and a proposed native hedge with irregularly spaced hedgerow trees. This hedgerow planting is likely to reach a maximum height of 3.5m at Year 15 and will ultimately be allowed to grow out to 5m.

All planting areas would be offset to a maximum of 50m from the property boundary.

# **Decommissioning Magnitude** of Change

	Construction Access Throughout the construction stage the Residential receptor will be affected due to the close proximity of the receptor and the proposed access track that connects towards field H5 at Cottam 2 Site.  Cable Route Corridor Residential receptor is outside of the 500m cable route corridor study area.  Substation/s Residential receptor is within the 2km study area for the Cottam 2 substation. There are potential views of the substation site, especially in winter months when the vegetation to the immediate east of the receptor has no foliage.			
Magnitude	Medium	Medium	Low	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor-Moderate <b>Not Significant</b>	Minor Not Significant

In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
Sequential Frequent Visibility Not Applicable.	<u>Summary paragraph</u>
Sequential Occasional Visibility  The south facing (first floor outlook) would be significantly affected by the Cottam 2 Site in its own right at the construction and operation stages, but the presence of intervening hedgerows and vegetation within the front garden would help provide some filtering of the works. The north facing first floor windows would also experience a narrow section of construction due to the small Site area on this aspect compared to the eastern aspect.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the chara area.  There would be the introduction of new elements and features comprising the solar panel areas and the substatio area within the character area.
In Combination From the south facing elevation (first floor outlook) only one site (Cottam 2) would be within the observers arc of vision at the same time without moving their head.	Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.2 [C6.4.8.15.2.2] which shows that with the Cottam 2 Site, cumulative visibility with the cumulate developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built for would also curtail cumulative visibility.
In succession Within a short time lapse, when moving to the north facing elevation (first floor outlook) of the property, two cumulative sites (Cottam 3a and 3b) would be within the observers arc of vision, but they would not be experienced in combination with the Cottam 2 Site due to the distance, the intervening presence of The Cottage, the settlement of Aisby beyond and hedgerow trees bordering the fields and the minor road network. The mature tree cover bordering Green Lane to the east of Pilham is also likely to curtail a significant level of visibility in this direction in addition to the other hedgerows and tree cover within the landscape.  No Cumulative Effects	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]  Overall Landscape Character of the Unwooded Vales  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retain strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansional landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor road to west and a more strategic road network north to south. These relevant characteristics of the landscape have so ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the C1 Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area.



Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Negligible Not Significant



[Reference: EN010133/APP/C6.3.8.3.3.2.3\_A] January 2023

# Residential Receptor - R61 / Greystones Farm

#### **Baseline Context:**

Detached, single dwelling on a long, narrow plot bordering Willingham Road with a large-scale agricultural building to the west. The main dwelling has a north south aspect with the front elevation facing over Willingham Road. The agricultural building occupies the plot to west of the main dwelling and closes down any visibility in this direction. There is a mature tree cover to the south side of the plot, which closes down views in this direction.

**Type:** Singular building

Distance to Cottam Sites: 50m to Cottam 1

Closest settlement: Fillingham at about 1.6km east

Nearest Viewpoint: VP32, VP33 and LCC-C-G

## **Description of Receptor:**

The principal ground floor windows face north and south over lawned gardens towards the boundary hedgerow framed by a dense area of trees and shrubs that occupy the majority of the garden. The east gable on the ground floor north faces towards a large-scale agricultural building with intervening tree cover. The east gable at ground floor has an immediate outlook over the boundary hedgerow to the garden.

The principal first floor windows face north and south over lawned gardens across the boundary vegetation framed by an area of trees and shrubs. The views extend from the property over the surrounding arable fields to the south and east. The first floor north facing windows look over the garden area and then Willingham Road. The east gable at first floor has an outlook over the hedgerow bordering the garden and then towards the arable landscape beyond. The west gable has an outlook over the large-scale agricultural building with a collection of mature trees and shrubs in the garden area, and then towards the arable landscape beyond.

The views are influenced by the presence of the north and south facing lawned gardens with a generous concentration of mature tree and shrub cover, which is the main focus, being a broadly rectangular plot. The other views offer some interesting features locally, but the more invigorating views towards the west are screened and filtered by intervening trees and woodland to the immediate west of the property. Tree cover is present within the garden area and located to all aspects of the dwelling. The surrounding arable land use is intensively managed with few features, but the presence of far-reaching views to the east and south adds some interest to the outlook from the property.

Overall, the views from the first-floor principle south facing elevation are likely to capture the main visual interest over the surrounding landscape towards Ingham across an open arable field. The ground floor principal windows are likely to capture immediate south and north facing views into the garden of the property and be curtailed by the presence of the intervening mature tree and shrub cover. The location offers some interesting features locally, but with more invigorating views out towards the surrounding landscape, which is large scale and exposed with few woodlands and tree cover. The tree cover is limited, the hedgerows are cut back, and the arable land use is intensively managed, but the presence of far-reaching views adds some stimulus with woodlands on the horizon that add balance to the landscape. The location offers some intimacy (despite the open nature of the arable landscape) due to the bordering hedgerows to each side of Willingham Road and the small woodland thickets. The horizon closes down the view since the landform rises to a high point on Long Lane at approximately 20m AOD rising to 30m AOD at the edge of the settlement of Ingham.

Sensitivity: High

## **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





# Residential Receptor - R61 / Greystones Farm

# **Construction Magnitude of Change**

The south facing first floor outlook would be significantly affected, but the presence of intervening hedgerows and vegetation within the surrounding garden would help provide some filtering of the works. The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be evident from the first-floor outlook, but the ground floor would benefit from the intervening tree and shrub cover within the garden, and also the area of small woodland to the west of the property and the large-scale agricultural building. During the latter part of the construction stage, views would become available of the elevated activities above the garden hedgerows. Due to the presence of tree cover in the garden, the works would benefit from screening such that these activities would be experienced over a filtered proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a proportion of the view framed by the first-floor windows and be a prominent feature. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact. The intervening garden to the south, the large-scale agricultural buildings to the west and the presence of the mature trees would also assist with mitigation. There would not be a fundamental change to the surroundings to the east and north of the property.

#### **Construction Access**

All throughout the construction stage the residential receptor will be affected due to Willingham Road having 3 points of access into the Cottam 1 North Site. The first point of access is close to Glebe Farm as it leads to field B2. The second point of access is close to North Farm as it leads to fields A2 and A4. The third point of access is close to Turpin's Farm Bungalow as it provides access to fields C3 and C4.

## **Cable Route Corridor**

Residential Receptor 61 is outside of the 500m cable route corridor study area.

Substation/s

# Operation Magnitude of Change (Year 1)

The principal first floor south facing windows would experience views over the area of panels, but their presence would be filtered by the influence of garden planting in the foreground.

The principal ground floor south facing windows would experience limited views of the panels due to the intervening garden and associated trees and shrubs and the boundary hedgerow to the garden, which is tall and dense.

The first floor north facing windows look over the garden area and Willingham Road and there will be no views of the panels.

The ground floor north facing windows look towards the garden area with no views of the panels.

The west gables have intervening garden tree and shrub cover and the large-scale agricultural buildings and so views of the panels are unlikely.

The experience of the ground floor views over the north and south facing lawned gardens, are unlikely to be significantly affected, remaining as an attractive outlook and well-vegetated plot. The presence of far-reaching views over the surrounding landscape with lngham in the distance would be significantly affected with the panel areas in the foreground but the presence of existing tree cover within the garden area would help curtail views.

# Mitigation (Operation Magnitude of Change at Year 15)

The first detailed designs were produced in tandem with consultation with residential property owners where this was requested by the owner. This consultation included both site and desk-based work to determine any direct impacts and suitable mitigation measures. Specific mitigation measures applicable to R61 are set out below:

The requirement for mitigation relates to visibility to the south over Cottam 1 North Site from the first floor of the property, where the windows are mainly south focused. The large agricultural building and planting along the south boundary of the garden curtails some visibility in this direction.

To the north aspect of the property, there would be no mitigation as there are no panels in this direction.

To the south of the property, the mitigation would include for an area of grassland and a proposed native hedge with irregularly spaced hedgerow trees. This hedgerow planting is likely to reach a maximum height of 3.5m at Year 15 and will ultimately be allowed to grow out to 5m.

To the east of the property, the mitigation would include an area of grassland and a proposed native hedge with irregularly spaced hedgerow trees. This hedgerow planting is likely to reach a maximum height of 3.5m at Year 15 and will ultimately be allowed to grow out to 5m.

To the west of the property, there would be no mitigation since the intervening mature tree cover and large-scale agricultural building would screen views of the panel areas.

# **Decommissioning Magnitude** of Change





	Residential receptor is outside of the 2km study areas for the substations.			
Magnitude	Medium	Medium	Low	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor-Moderate <b>Not Significant</b>	Minor Not Significant

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	Sequential Frequent Visibility	<u>Fabric of the Landscape</u>
	Not Applicable	There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	Sequential Occasional Visibility	
	The south facing (first floor) outlook would be significantly affected by the Cottam 1 North Site in its own right	There would be the introduction of new elements and features comprising the solar panel areas and the substation
	at the construction and operation stages, but the presence of intervening hedgerows and vegetation within the surrounding garden would help provide some filtering of the works.	area within the character area
		<u>Aesthetic Aspects of the Landscape</u>
	In Combination	Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the
	From the south facing elevation (first floor outlook) only one site (Cottam 1 North) would be within the observers arc of vision at the same time without moving their head.	cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
	No cumulative effects.	
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1
	In succession Within a short time lapse, when moving to the north facing elevation (first floor outlook) only one site (Cottam 1 North) would be within the observers arc of vision at the same time without moving their head.	Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:
	(cottain 1 Notar) Would be Walling the observers are of Vision at the same time walloat moving them nead.	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]
	No Cumulative Effects	Figure 8.15.2.8 Cottam 1, 2, 3a and Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low







Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Negligible Not Significant



# Residential Receptor - R62 / Turpin Farm

#### **Baseline Context:**

Turpin Farm is located to the south side of Willingham Road and further collection of dwellings to the north side of Willingham Road, known as Turpin's Bungalow. Turpin Farm comprises agricultural and stable buildings with no evidence of residential occupancy. Turpin's Bungalow comprises a terrace of single-story dwellings separated from the road frontage by a short ditch and low-cut hedgerow. There is also a further two-story double fronted (handsome) brick dwelling set back from the road frontage behind a belt of mature trees with outbuildings to the rear.

**Type:** Group of buildings

Distance to Cottam Sites: 29m to Cottam 1

Closest settlement: Coates at about 2km south

**Nearest Viewpoint:** VP37, LCC-C-J and LCC-C-I.

# **Description of Receptor:**

## **Bungalows**

The principal ground floor windows face in all directions over a large garden with mature tree cover. The house is set at the end of the drive with garages and outbuildings to the northeast. The secondary ground floor windows face across the rear garden towards a collection of sheds and tree and shrub cover, then with agricultural land beyond. The east gable on the ground floor faces towards a small area woodland and the west gable has an immediate outlook over the drive/parking area and then towards arable fields.

There are no first-floor windows.

## **Two-Storey Dwelling**

The principal ground floor windows face in all directions towards gardens which are framed by a dense area of trees and shrubs that occupy the majority of the garden. The house is situated at the end of a long access drive with garages and outbuildings to the northeast in the context of a vegetable garden.

The principal first floor windows face in all directions over gardens framed by an area of trees and shrubs. The views extend from the property over the surrounding arable fields to the east, whereas the first floor west, south north facing windows look over the garden area and also Willingham Road with the arable landscape beyond.

The views from both the bungalows and the two-storey dwelling are influenced by the presence of the gardens and the generous concentration of mature tree and shrub cover within the garden of the two-storey property. Tree cover is present within the garden area and located to all aspects of the two-storey dwelling, apart from to the east where the views are more open. The surrounding arable land use is intensively managed with few features, but the presence of the local concentration of woodland adds some interest to the outlook from the property.

Overall, the views from the first-floor windows of the two-storey dwelling to the east are likely to capture the main visual interest over the surrounding landscape since the remainder of the outlook is enclosed by the mature tree cover. The ground floor windows of both the bungalows and the two-storey properties are likely to capture immediate views into the gardens of the properties and be curtailed by the presence of the intervening mature tree and shrub cover. The location offers some interesting features locally, but the more invigorating views out towards the surrounding landscape are limited due to the presence of woodlands and tree cover. The location offers some intimacy (despite the open nature of the arable landscape) due to the bordering hedgerows to each side of Willingham Road and the small woodland thickets. The horizon closes down the view since the landform rises to a high point on Coates Lane and tree cover around the settlement of Coates also closes down visibility. Within the wider landscape, the field hedgerows are cut back, and the arable land use is intensively managed, however the mature ash trees within the hedgerows are a strong feature.

**Sensitivity:** *High* 

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.





Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

#### Residential Receptor - R62 / Turpin Farm Mitigation **Operation Magnitude of Change Construction Magnitude of Change Decommissioning Magnitude** (Year 1) (Operation Magnitude of Change at Year 15) of Change The east facing first floor outlook from the two-storey The principal first floor east facing windows The first detailed designs were produced in tandem with A similar process to that of construction stage, but with the dwelling would be significantly affected, but the of the two-storey dwelling would experience consultation with residential property owners where this Scheme being no longer operational. This is an assessment presence of intervening tree cover within the views over the area of panels, but their was requested by the owner. This consultation included of the Site in winter but assumes retention of existing surrounding garden would help provide some filtering of presence would be filtered by the influence both site and desk-based work to determine any direct vegetation and builds upon the proposed primary and

the works. The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be evident from the first-floor outlook, but the ground floor would benefit from the intervening tree and shrub cover within the garden. During the latter part of the construction stage, views would become available of the elevated activities above the garden vegetation at both the bungalows and two-storey property. Due to the presence of tree cover in the garden, the works would benefit from screening such that these activities would be experienced over a filtered proportion of the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct small proportion of the view framed by the first-floor windows from the two-storey property to the east but would not be a prominent feature. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact. The intervening garden to the east and the presence of the

of garden planting in the foreground.

The principal ground floor south facing windows of both the bungalow and twostorey property would experience limited views of the panels due to the intervening garden and associated trees and shrubs.

The first floor north facing windows of the two-storey property look over the garden area and there is likely to be some views of the panels above and through the tree

The ground floor of the bungalow and the two-storey dwelling (north facing windows) look towards the garden area with no views of the panels.

The west gable of the bungalows has no intervening garden tree and shrub cover and so views of the panels are likely.

The experience of the ground floor views of both the bungalow and the two-storey property are unlikely to be significantly affected, apart from the views towards the west from the bungalows. The presence of far-reaching views over the surrounding landscape with Ingham in the distance would not be significantly affected.

impacts and suitable mitigation measures. Specific mitigation measures applicable to R62 are set out below:

The requirement for mitigation relates to visibility in all directions towards the Cottam 1 North Site. The main area of visibility is likely to be associated with the detached two-storey dwelling towards the east. Due to the mature tree cover to the north, west and south of the property and the outbuildings this helps curtail the majority of the views from this property. The bungalows have partially enclosed views towards the north over the Cottam 1 North Site, due to the tree cover within the rear gardens the views towards the south across Willingham Road over the Cottam 1 North Site are also curtailed by the roadside

To the north aspect of both the bungalows and the twostorey dwelling, there would be the addition of an area of grassland and native shelter belt/woodland planting. This woodland planting is likely to reach a maximum height of 7.5m at Year 15.

To the south of the bungalows and the two-storey dwelling there would be no mitigation proposed since there is already a dense collection of mature trees and hedgerows. To the south of Turpin Farm, the mitigation would include the addition of native shelter belt/woodland planting. This woodland planting is likely to reach a maximum height of 7.5m at Year 15.

To the east of the two-storey property, the mitigation would include for an area of grassland and a proposed native hedge with irregularly spaced hedgerow trees. This hedgerow planting is likely to reach a maximum height of

secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.



	mature trees would also assist with mitigation. There would be a fundamental change to the surroundings to the north, south, east, and west of the property.  Construction Access All throughout the construction stage the residential receptor will be affected due to Willingham Road having 3 points of access into the Cottam 1 North Site. The first point of access is close to Glebe Farm as it leads to field B2. The second point of access is close to North Farm as		3.5m at Year 15 and will ultimately be allowed to grow out to 5m.  To the west of the bungalows, there would be the addition of native shelter belt/woodland planting. This woodland planting is likely to reach a maximum height of 7.5m at Year 15.  All planting areas would be offset to a maximum of 50m from the property boundary.	
	it leads to fields A2 and A4. The third point of access is close to Turpin's Farm Bungalow as it provides access to fields C3 and C4.  Cable Route Corridor  Residential receptor 62 is outside of the 500m cable route study corridor study area.		Trom the property boundary.	
	Substation/s The residential receptor is outside the 2km study areas for the substations.			
Magnitude	Medium	Medium	Low	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor-Moderate <b>Not Significant</b>	Minor <b>Not Significant</b>

esidential Receptor – R62 / Turpin Farm		
In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
Sequential Frequent Visibility	<u>Fabric of the Landscape</u>	
Not Applicable	There would not be the removal of or changes in individual elements or features of the landscape within the character	
Convential Occasional Visibility	area.	
Sequential Occasional Visibility  The east facing (first floor) outlook from the two-storey dwelling would be significantly affected by the	There would be the introduction of new elements and features comprising the solar panel areas and the substation area	
Cottam 1 Site in its own right at the construction and operation stages, but the presence of intervening	within the character area	
tree cover within the surrounding garden would help provide some filtering of the works. The ground		
floor of the bungalow looks towards the garden area with no views of the operation stage (the works) or	Aesthetic Aspects of the Landscape	
the area of panels (construction stage).	Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the	
	cumulative developments would not be experienced across the majority of the 5km study area. This is due to the	
In Combination  From the part facing elevation (first floor) outlook from the two steroy dwelling only one site (Cottom 1)	distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
From the east facing elevation (first floor) outlook from the two-storey dwelling only one site (Cottam 1 North) would be within the observers arc of vision at the same time without moving their head. From	built form would also curtain cumulative visibility.	
the west facing elevation (ground floor) of the bungalow only one site (Cottam 1) would also be within	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1	
the observers arc of vision.	Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in	
	further detail within the following figures:	
No cumulative effects.		
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]	
In succession  Within a short time lance, when moving to the north, south and west facing elevation (first floor) outlook	Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]	
Within a short time lapse, when moving to the north, south and west facing elevation (first floor) outlook of the two-storey dwelling only one site (Cottam 1 North) would be within the observers arc of vision at	Figure 6.13.2.3 Cottain 1, 2, 3d and 3D West burton cumulative Developments Augmented 217 [C6.3.4.13.2.9]	
the same time without moving their head. From the north and south facing elevation (ground floor) of	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area	
the bungalow only one site (Cottam 1) would also be within the observers arc of vision.	different from another. The strategic major road network is defined by important historic routes and in contrast, the east	





	No Cumulative Effects	west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the
		area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Negligible Not Significant



[Reference: EN010133/APP/C6.3.8.3.3.2.5] January 2023

# Residential Receptor - R63a / North Farm

#### **Baseline Context:**

North Farm comprises a two-storey main dwelling with a small collection of outbuildings situated to the west of the main dwelling, that are all served by a single access track off Willingham Road. The main dwelling and outbuildings are located towards the northern part of a large, broadly rectangular plot. The main dwelling is set at the end of the long access drive and there are two small ponds located to the southwest of the rectangular plot. The collection of outbuildings to the west of the main house help to close down visibility in views towards the west. The main dwelling has a north south orientation, with the principal elevation facing south over a rectangular, lawned garden. This lawned garden is bordered by a low hedgerow to the west where it shares a boundary with the access track from Willingham Road. There is a taller hedgerow (and scattered trees) to the south boundary of the lawned garden that is a shared boundary with Willingham Road. These bordering hedgerows to the lawned area help to curtail visibility towards the south and west from the lawned part of the garden and from the ground floor south facing windows of the main house. There is also an area of deciduous woodland to the northern-most part of the plot behind the main house, which also provides screening in this direction. Further tree cover includes an orchard that is located to the east of the main dwelling, which also helps to curtail some visibility in this direction from the property curtilage. The main areas of open visibility are focused towards the south and the northeast of the property where there are lower concentrations of existing vegetation. The main focus of visibility is experienced from the first-floor principal bedroom and secondary bedrooms of the main dwelling that face south.

**Type:** Singular building

Distance to Cottam Sites: 46m to Cottam 1

Closest settlement: Fillingham at about 2.6km east

Nearest Viewpoint/s: VP35, VP36 and LCC-C-H

## **Description of Receptor:**

The principal ground floor windows face south looking across the lawned gardens towards Willingham Road and then towards the agricultural fields beyond that are divided by a strong network of hedgerows. The secondary ground floor windows face north across a small lawned rear garden towards a small paddock bordered by a hedgerow, then with an area of deciduous woodland beyond. The windows in the west gable on the ground floor face towards a lawned area of garden and then towards the access drive and the collection of agricultural buildings beyond (with a small area of mature tree cover to the south of these outbuildings). The windows in the east gable have a similar outlook to the west gable with views over lawned gardens and with some visibility curtailed by the deciduous woodland to the northeast, then with views towards the arable fields towards the east and southeast.

The principal first floor windows face south looking over the lawned gardens towards Willingham Road and then towards the agricultural fields beyond. The secondary ground floor windows face north over a lawned rear garden towards a small paddock bordered by a hedgerow, then with an area of deciduous woodland beyond. The windows in the west gable on the first-floor face over a lawned area of garden and then with extended visibility towards the access drive and the collection of agricultural buildings beyond (with an area of mature tree cover to the south of these outbuildings). The windows in the east gable on the first floor have a similar outlook over lawned gardens with some visibility curtailed by the small area of woodland to the south of the outbuildings, then with views towards the arable fields beyond.

The views are influenced by the presence of the large lawned gardens to the south of the property that are bordered by well-established hedgerows to three sides and the generous area of deciduous woodland to the north also provides significant influence over the views from the property. Tree cover is present within the hedgerows to the boundaries of the lawned garden area and around the two ponds to the southwest corner of the plot. The surrounding arable land use is intensively managed with a good network of hedgerows, and the presence of the local concentration of deciduous woodland adds some interest to the outlook from the property.

Overall, the views from the first-floor windows of the two-storey main dwelling towards the south are likely to capture the main visual interest over the surrounding landscape since the outlook to the north is influenced by the presence of the deciduous woodland. The ground floor windows of the main house capture immediate views over the lawned gardens, but any immediate views beyond the property curtilage are curtailed by the presence of the intervening hedgerows that define the lawned gardens to the plot. The location offers some interesting features within the immediate context of the main dwellings, but with the more invigorating views out towards the surrounding landscape to the south and with the views towards the north being limited due to the presence of woodlands and tree cover. Within the wider landscape, the field hedgerows provide a very strong framework and help break up the presence of the open, arable fields in the landscape. Even though the arable land use is intensively managed, the hedgerows and the mature ash trees within the hedgerows are a strong feature and add to the wooded perception of the landscape.

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.



Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Residential Receptor - R63	BA / North Farm
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# **Construction Magnitude of Change**

# The south facing first floor outlook from the two-storey main dwelling would be significantly affected by the construction works, but the presence of tree and hedgerow cover within the intervening field systems would help provide some filtering of the views and alleviate the impacts to a moderate degree. The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be evident from the first floor south facing outlook from the main house, but the ground floor would benefit from the intervening tree and shrub cover within the garden and the hedgerows in the outlying field to screen views. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerows. The works would be experienced over a wide proportion of the view, but the activities would be screened by intervening hedgerows and tree cover.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a wide proportion of the view experienced from the first-floor windows from the two-storey property towards the south, but the works would not be a prominent feature since the intervening hedgerows and tree cover would assist with the screening and separation of views from the property. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact as strong features in the landscape.

## **Construction Access**

All throughout the construction stage the residential receptor will be affected due to Willingham Road having 3 points of access into the Cottam 1 North

# Operation Magnitude of Change (Year 1)

The principal first floor south facing windows of the two-storey dwelling would experience views over the area of panels, but their presence would be filtered by the influence of the intervening hedgerows and tree cover between the field parcels.

The principal ground floor south facing windows would experience limited views of the panels due to the intervening garden and associated trees and shrubs. The hedgerows bordering Willingham Road and the field boundary hedgerows beyond would also curtail visibility in this direction.

The secondary ground floor north facing windows would experience no views of the panels due to the intervening garden and area of deciduous woodland.

The secondary first floor north facing windows look over the garden area and the deciduous woodland and there is likely to be no views of the panels.

The ground floor and first floor windows of the west gable of the main house look across intervening lawned gardens with tree and shrub cover. There are also intervening arable fields with a strong hedgerow network and so views of the panels are unlikely.

The ground floor and first floor windows of the east gable of the main house look across intervening lawned gardens with tree and shrub cover. There are also intervening arable fields with a strong hedgerow network and so views of the panels are unlikely.

The experience of the ground floor views of the main house are unlikely to be significantly affected. The first-floor views from the south elevation are likely to

# Mitigation (Operation Magnitude of Change at Year 15)

The first detailed designs were produced in tandem with consultation with residential property owners where this was requested by the owner. This consultation included both site and desk-based work to determine any direct impacts and suitable mitigation measures. Specific mitigation measures applicable to R63A are set out below:

The requirement for mitigation relates to visibility in all directions towards the Cottam 1 North Site. The main area of visibility is likely to be associated with the views towards the south from the main dwelling house. Due to the mature tree cover to the north and east of the property and the outbuildings towards the west, this helps curtail the majority of the visibility towards the west, east and north.

To the north aspect of the main house, there would be the addition of an area of grassland with native shelter belt/woodland planting beyond. This woodland planting is likely to reach a maximum height of 7.5m at Year 15.

To the south aspect of the main house, there would be mitigation to the south side of Willingham Road to comprise the reinforcement of existing hedgerows with regularly spaced trees. The mitigation would also include for the addition of native shelter belt/woodland planting along the watercourse to the north of Larch Plantation. This woodland planting is likely to reach a maximum height of 7.5m at Year 15.

To the east of the main house, the mitigation would include the retention of existing hedgerows and scattered tree planting along the tributary of the River Till to the east.

# Decommissioning Magnitude of Change



	Site. The first point of access is close to Glebe Farm as it leads to field B2. The second point of access is close to North Farm as it leads to fields A2 and A4. The third point of access is close to Turpin's Farm Bungalow as it provides access to fields C3 and C4.  Cable Route Corridor Residential Receptor 63A is outside the 500m cable corridor route study area.  Substation/s The residential receptor is outside the 2km study areas for the substations.	be significantly affected by the presence of the panels due to the availability of views over the surrounding landscape with Ingham in the far distance.	To the west of the main house, there would be the addition of a field of bird mitigation and a proposed native hedge with irregularly spaced hedgerow trees. This hedgerow planting is likely to reach a maximum height of 3.5m at Year 15 and will ultimately be allowed to grow out to 5m.  All planting areas would be offset to a maximum of 50m from the property boundary.	
Magnitude	Medium	Medium	Low	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor-Moderate <b>Not Significant</b>	Minor Not Significant

In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
Sequential Frequent Visibility Not Applicable.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the
Sequential Occasional Visibility  The south facing (first floor) outlook from the two-storey dwelling would be significantly affected by Cottam 1 in its own right at the construction and operation stages, but the presence of tree and	character area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area
hedgerow cover within the intervening field systems would help provide some filtering of the works.  In Combination From the south facing elevation (first floor) outlook from the two-storey dwelling only one site (Cottam 1 North) would be within the observers arc of vision at the same time without moving their head.	Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
No cumulative effects.  In succession	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:
Within a short time lapse, when moving to the north, west and east facing elevations (first floor) outlook of the two-storey dwelling only one site (Cottam 1 North) would be within the observers arc of vision at the same time without moving their head.	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
No Cumulative Effects	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
	Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which



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		are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Negligible Not Significant



## Residential Receptor - R63b / Side Farm

#### **Baseline Context:**

Side Farm is a farmstead with single dwelling towards the southern end of the plot. A large-scale agricultural building and stable block (or long barn) are situated to the northern part of the plot. The main dwelling has a north south orientation, with the main elevation facing south over lawned gardens enclosed by mature tree cover to the west and south boundaries. The agricultural building closes down any visibility towards the north and there are also mature trees along the watercourse to the south, which is a local tributary of the River Till. There is an open aspect from the dwelling towards the east.

**Type:** Singular building

Distance to Cottam Sites: 11m to Cottam 1

Closest settlement: Coates at about 2.1km south

Nearest Viewpoint: VP37, LCC-C-J and LCC-C-I

## **Description of Receptor:**

The principal ground floor windows face south looking across the lawned gardens towards the local tributary of the River Till. The secondary ground floor windows face north looking across a small yard and parking area, then with a small internal paddock and a large-scale agricultural building beyond. The west gable on the ground floor faces towards a small area of woodland. The east gable has an outlook over a small lawned garden and a small paddock, then with a series of agricultural fields beyond.

The principal first floor windows face south looking over the lawned gardens towards the local tributary of the River Till and then with agricultural fields beyond. The secondary first floor windows face north looking over a small yard and parking area, then with a small internal paddock and a large-scale agricultural building beyond. The west gable on the ground floor faces over a small area of woodland and then with the collection of agricultural fields beyond. The east gable has an outlook over a small lawned garden and a small paddock, then with a series of agricultural fields beyond.

The views are influenced by the presence of the lawned gardens and small paddocks that surround the plot. Tree cover is present to the boundaries of the lawned garden area around two sides and this is a strong feature in the context of the wider landscape that is generally devoid of tree cover. The surrounding arable land use is intensively managed with few features, but the presence of the local concentration of the woodland known as Larch Plantation adds some interest to the outlook from the property. The large-scale agricultural building is also a prominent feature.

Overall, the views from the first-floor windows of the two-storey dwelling to the south are likely to capture the main visual interest over the surrounding landscape since the outlook to the north is influenced by the presence of the large-scale agricultural building. The ground floor windows of the main house capture immediate views over the lawned gardens. The location offers some interesting features locally, but invigorating views out towards the surrounding landscape to the south are curtailed by the presence of woodlands and tree cover around the plot. Within the wider landscape, there is a distinct absence of field hedgerows to provide a strong framework as the arable land use is intensively managed and so the woodlands on the horizon towards the east form a significant component and add balance to the landscape. The mature ash trees within the hedgerows are however a strong feature.

**Sensitivity:** *High* 

## **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



[Reference: EN010133/APP/C6.3.8.3.3.2.6\_A] January 2023

## Residential Receptor - R63B / Side Farm

# **Construction Magnitude of Change**

The south facing first floor outlook from the two-storey dwelling would be significantly affected, but the presence of tree and hedgerow cover within the boundary of the garden area would help provide some filtering of the works. The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be evident from the first-floor outlook, but the ground floor would benefit from the intervening tree and shrub cover within the garden and the presence of Larch Plantation to screen views. During the latter part of the construction stage, views would become available of the elevated activities above the tree cover within the lawned area of the garden. The works would be experienced over a wide proportion of the view, but the activities would be screened by intervening hedgerows and tree cover.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a wide proportion of the view framed by the first-floor windows from the two-storey property to the south and would be a prominent feature since the intervening tree cover would not fully assist with the screening and separation from the property. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact as strong features in the landscape. There would be fundamental change to the surroundings to the north, east, south, and west of the property.

#### **Construction Access**

All throughout the construction stage the residential receptor will be affected due to Willingham Road having 3 points of access into the Cottam 1 North Site. The first point of access is close to Glebe Farm as it leads to field B2. The second point of access is close to North Farm as it leads to fields A2 and A4. The third point of access is close to Turpin's Farm Bungalow as it provides access to fields C3 and C4.

### **Cable Route Corridor**

Residential receptor 63B is outside of the 500m cable corridor route study area.

#### Substation/s

# Operation Magnitude of Change (Year 1)

The principal first floor south facing windows of the two-storey dwelling would experience views over the area of panels, and their presence would hardly be filtered since the influence of the intervening hedgerows and tree cover between the field parcels is limited.

The principal ground floor south facing windows would experience limited views of the panels due to the intervening garden and associated trees and shrubs.

The first floor south facing windows look over the garden area and the hedgerows and there is likely to be views of the panels.

The secondary ground floor north facing windows would experience no views of the panels due to the intervening large scale agricultural building and long barns.

The secondary first floor north facing windows look over the garden area and the large-scale agricultural buildings and long barns and there is likely to be some views of the panels, but at an oblique angle.

The ground floor and first floor windows of the west gable of the main house directly looks the boundary tree and shrub cover and so views of the panels are unlikely.

The experience of the ground floor views of the main house are unlikely to be significantly affected. The first-floor views from the south elevation are likely to be significantly affected where presence of far-reaching views over the surrounding landscape with Coates in the far distance would be significantly affected.

# Mitigation (Operation Magnitude of Change at Year 15)

The first detailed designs were produced in tandem with consultation with residential property owners where this was requested by the owner. This consultation included both site and desk-based work to determine any direct impacts and suitable mitigation measures. Specific mitigation measures applicable to R63B are set out below:

The requirement for mitigation relates to visibility towards the Cottam 1 North Site. The main area of visibility is likely to be associated with the views towards the south. Due to the mature tree cover to the south and west of the property this helps the majority of visibility in this direction at ground floor level. Views are also curtailed by the intervening large-scale agricultural building and stable block or long barn. The mature tree cover closes down views towards the west and planting along the watercourse to the south helps to break down visibility. There are open views towards the east.

To the north aspect of the main house, there would be no mitigation since the large scale and agricultural building closes down visibility.

To the south aspect of the main house, the existing tree belt would provide sufficient screening at close range. Within intervening fields there would be new native hedgerows with irregularly spaced hedgerow trees. This hedgerow planting is likely to reach a maximum height of 3.5m at Year 15 and will ultimately be allowed to grow out to 5m.

To the east of the main house, the provision of native shelter belt/woodland planting along the watercourse to the north of Larch Plantation. This woodland planting is likely to reach a maximum height of 7.5m at Year 15.

To the west of the main house, the existing tree belt would provide sufficient screening at close range. There would also be the provision of native shelter belt/woodland planting along the watercourse to the north of Larch Plantation. This woodland planting is likely to reach a maximum height of 7.5m at Year 15.

All planting areas would be offset to a maximum of 50m from the property boundary

# **Decommissioning Magnitude** of Change



	The residential receptor is outside the 2km study area for the substations.			
Magnitude	Medium-	Medium-	Low	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor-Moderate <b>Not Significant</b>	Minor Not Significant

Residential Recepto	or – R63B / Side Farm	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	Sequential Frequent Visibility Not Applicable.  Sequential Occasional Visibility The south facing (first floor) outlook from the two-storey dwelling would be significantly affected by Cottam 1 in its own right at the construction and operation stages, but the presence of tree and hedgerow cover within the boundary of the garden area would help provide some filtering of the works.  In Combination From the south facing elevation (first floor) outlook from the two-storey dwelling only one site (Cottam 1 North) would be within the observers arc of vision at the same time without moving their head.  No cumulative effects.  In succession Within a short time lapse, when moving to the north, west and east facing elevations (first floor) outlook of the two-storey dwelling only one site (Cottam 1 North) would be within the observers arc of vision at the same time without moving their head.  No Cumulative Effects	Eabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area  Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 (IC6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.  There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Talibridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]  The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.  Overall Landscape Character and Visual Amenity Overall, the character of the landscape an
		characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.  Construction: Very Low
Magnitude	No Change	Operation (Year 1): Very Low



		Operation (Year 1): with only Embedded Mitigation: Very Low
		Operation (Year 15): Low
		Decommissioning: Very Low
		Construction: Adverse & Short Term
		Operation (Year 1): Adverse & Long Term
Type of Effect No 0		Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
		Operation (Year 15): Beneficial & Long Term
		Decommissioning: Neutral & Short Term
		Construction: Negligible Not Significant
Significance of		Operation (Year 1): Negligible <b>Not Significant</b>
	No Change	Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant
Effect		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Negligible Not Significant



## Residential Receptor - R67 / Moor Farm

#### **Baseline Context:**

Farmstead occupying a long, wide plot with a single dwelling just off South Lane at its southern-most end. The dwelling is located towards the western end of the plot overlooking South Lane and there are other outbuildings and barns to the east and south of this. The dwelling has an outlook on three sides with the northern boundary enclosed with mature tree cover and hedgerows. The tree cover in the front garden closes down any visibility towards the west but there is a partially open aspect. There are some mature trees to the west side of South Lane, but the hedgerows are generally open and low-cut.

**Type:** Singular building

Distance to Cottam Sites: 80m to Cottam 1

Closest settlement: Coates at about 1.4km south

Nearest Viewpoint: VP38, LCC-C-J and LCC-C-K.

## **Description of Receptor:**

The principal ground floor windows face west looking across a grassed area towards South Lane. There are also windows looking south looking towards a large-scale agricultural building. The secondary ground floor windows face north looking towards a dense tall hedgerow, then with arable fields beyond. The east gable is attached to outbuildings and a large-scale agricultural building with no outlook.

The principal first floor windows face west looking across a grassed area towards South Lane and open arable fields beyond. The first-floor windows are also south looking towards a large-scale agricultural building and a small area of woodland bordering South Lane beyond. The secondary ground floor windows face north looking over a dense tall hedgerow, then with arable fields beyond. The east gable is attached to outbuildings and a large-scale agricultural building with no outlook.

The views are influenced by the presence of the large-scale agricultural buildings that dominate the plot to the east and the south. Tree cover is present to the boundaries of South Lane just to the south of the property and this is a strong feature in the context of the wider landscape that is generally devoid of tree cover. The surrounding arable land use is intensively managed with few features, but the presence of the local concentration of the tree cover along South Lane and the tree cover adjoining the local tributary of the River Till is a strong feature.

Overall, the views from the first-floor windows of the two-storey dwelling to the north and west are likely to capture the main visual interest over the surrounding landscape since the outlook to the south and east is influenced by the presence of the large-scale agricultural buildings. The ground floor windows of the main house capture immediate views over the gardens and agricultural buildings, but there may be some views towards the west due to the absence of hedgerows to both sides of South Lane at this location. The location offers some interesting features locally, but invigorating views out towards the surrounding landscape to the south are curtailed by the presence of woodlands and buildings around the plot. Within the wider landscape, there is a distinct absence of field hedgerows to provide a strong framework as the arable land use is intensively managed and so the shelterbelts on the horizon towards the east form a significant component and add balance to the landscape. The mature ash trees within the hedgerows are however a strong feature. This location offers some intimacy since this is a local lane with little traffic and there is no major settlement to disrupt the tranquility.

**Sensitivity:** High

## **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



# **Residential Receptor - R67 / Moor Farm**

# Construction Magnitude of Change

The west facing first floor outlook from the two-storey dwelling would be significantly affected, due to the absence of tree and hedgerow cover within the boundary of the garden area to provide screening of the works. The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be evident from the first-floor outlook, and the ground floor would not benefit from the intervening tree and shrub cover. During the latter part of the construction stage, views would become available of the elevated activities across the open arable fields. The works would be experienced over a wide proportion of the view, but the activities would be set across an open field.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a wide proportion of the view framed by the first-floor windows from the two-storey property to the west and would be a prominent feature since there is no intervening tree cover to assist with the screening and separation from the property. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact as strong features in the landscape. There would not be a fundamental change to the surroundings to the north, of the property.

### **Construction Access**

All throughout the construction stage the residential receptor will be affected due to South Lane having a point of access into the Cottam 1 North site/Sites. The access point is between Lowfield Farm and Moor Farm as it connects to fields G2 and G3.

## **Cable Route Corridor**

Residential Receptor 67 is within the 500m cable corridor route study area. There are potential views of the cable route.

#### Substation/s

The residential receptor is within the 2km study area for the Cottam 1 substation. There will be views of the substation site across the field to the west.

# Operation Magnitude of Change (Year 1)

The principal first floor west facing windows of the two-storey dwelling would experience views over the area of panels, and their presence would hardly be filtered by the absence of the intervening hedgerows and tree cover.

The principal ground floor south facing windows would experience no views of the panels due to the intervening tree cover and large-scale agricultural buildings.

The first floor south facing windows look over the large-scale agricultural buildings and the tree cover to South Lane and there is unlikely to be views of the panels.

The secondary ground floor west facing windows would experience views of the panels due to the lack of intervening tree cover.

The secondary ground floor west facing windows look over South Lane would have likely views of the panels, but at an oblique angle and with an arable field in the foreground.

The ground floor and first floor windows of the west gable of the main house directly looks across South Lane where there are no hedgerows or tree cover and so views of the panels are likely.

# Mitigation (Operation Magnitude of Change at Year 15)

The first detailed designs were produced in tandem with consultation with residential property owners where this was requested by the owner. This consultation included both site and desk-based work to determine any direct impacts and suitable mitigation measures. Specific mitigation measures applicable to R67 are set out below:

The requirement for mitigation relates to visibility towards Cottam 1 North Site. The mature tree cover in the south part garden of the property closes down some views towards the south and the large-scale agricultural buildings helps to break down visibility also. There is some open visibility towards the west.

To the north aspect of the main house, there would be no mitigation since there are no panels in this direction at close range.

To the south aspect of the main house, the existing tree belt would provide sufficient screening at close range. Within intervening fields there would be new native hedgerows with irregularly spaced hedgerow trees. This hedgerow planting is likely to reach a maximum height of 3.5m at Year 15 and will ultimately be allowed to grow out to 5m.

To the east aspect of the main house, there would be no mitigation since there are no panels in this direction at close range.

To the west of the main house, the existing hedgerow along the watercourse would be enhanced with irregularly spaced hedgerow trees. This hedgerow planting is likely to reach a maximum height of 3.5m at Year 15 and will ultimately be allowed to grow out to 5m.

# **Decommissioning Magnitude** of Change

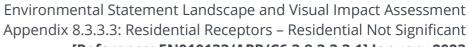


			All planting areas would be offset to a maximum of 50m from the property boundary	
Magnitude	Medium	Medium	Low	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor-Moderate <b>Not Significant</b>	Minor <b>Not Significant</b>

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	Sequential Frequent Visibility	Fabric of the Landscape
	Not Applicable.	There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	<u>Sequential Occasional Visibility</u> The west facing (first floor) outlook from the two-storey dwelling would be significantly affected by Cottam 1 in its own right during the construction and operation stages, due to the absence of tree and hedgerow cover within the boundary of the garden area to provide screening of the works.	There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area
		Aesthetic Aspects of the Landscape
	In Combination From the west facing elevation (first floor) outlook from the two-storey dwelling only one site (Cottam 1 North) would be within the observers arc of vision at the same time without moving their head.	Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
	No cumulative effects.	
	In succession Within a short time lapse, when moving to the south, west and east facing elevations (first floor) outlook of the	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:
	two-storey dwelling only one site (Cottam 1 North) would be within the observers arc of vision at the same time without moving their head.  No cumulative effects.	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects
Magnitude	No Change	Construction: Very Low Operation (Year 1): With only Embedded Mitigation: Very Low Operation (Year 15): Low



		Decommissioning: Very Low
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect		Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Negligible Not Significant





[Reference: EN010133/APP/C6.3.8.3.3.3.1] January 2023

## Residential Receptor - R09 - Cold Harbour

## **Receptor Baseline:**

This view is Blyton Park Racing Centre with parking and access tracks. Main administrative building is a large-scale storage shed with no clearly defined aspect or outlook. The immediate curtilage to the shed has an open aspect towards the north, west and east and a partially open aspect towards the south. There is a collection of outbuildings (R10) to the south of the shed, with a mature belt of scrub and tree cover beyond.

**Type:** Singular building

Distance to Cottam Sites: 36m to Cottam 3a

Closest settlement: Northorpe at about 1.3km east

## **Description of Receptor:**

Non-residential receptor. The views from this receptor are low level, being pedestrians/workers and drivers. Surrounding views include the racetrack to the west, additional buildings to the south and southeast with a burial ground beyond the racetrack to the northeast.

## **Nearest Viewpoint: VP60**

The view is located on the B1025 (Kirton Road) at the entrance to the Blyton Park Driving Centre, looking northwest directly over the Cottam 3a Site and southwest towards the Cottam 3b Site, with the Cottam 2 Site beyond.

The view is influenced by the open nature of the location and the presence of the Blyton Park Driving Centre and its associated hanger, access roads and parking areas. Although Kirton Road is defined by strong hedgerows they are low-cut and the hedgerow trees are weak and this gives an uncomfortable feeling to the route, especially given that it is a long straight road with fast moving traffic and no footways, with only narrow grass verges. The existing vegetation bordering the mainline railway is the appealing feature of the view along with the dense shelterbelt vegetation between the field systems which provides effective screening in this direction. The wind turbine on the Site/Sites is prominent from this viewpoint, but the low scrub in the foreground helps to mitigate its presence. The viewpoint offers some interesting but highly detracting features locally, that are evident in sharp contrast to the more invigorating views out towards the surrounding landscape of Laughton Woods and Laughton Common as a strong wooded horizon. The overall experience is that of an unsettling location with overwhelming feelings of insecurity. The distant electricity pylons and the sporadic buildings, signage and gateway fencing in the foreground also add to the discordancy and uncomfortable nature of the view.

## **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



# Residential Receptor - R09 / Cold Harbour

Construction

# ar Receptor - Ros / Cold Har boar

Views of the construction will be predominantly available to the southwest and east at the closest distance with views to the south somewhat screened by existing buildings. Views further southwest are beyond the intervening panelled areas.

Views are already somewhat degraded by the existence of the racetrack and associated infrastructure and remnant airfield structures.

The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground and lower-level activities such as the construction of the substation, solar panel areas and associated infrastructure and inverters would be evident. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerows.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities Would be evident in the close-mid range views. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would be a change to the arable land use around this receptor, but the field boundaries and the associated tree cover would remain intact. The immediate surroundings to this building would not alter and there would be no fundamental change to the surroundings to the northwest.

#### **Construction Access**

The residential receptor will be affected by construction traffic due to the distance between

# Operation (Year 1)

There are no first-floor windows to this building which is not a dwelling, but an administrative building housed in the barn.

There are no ground floor windows to this building, but the curtilage has an open aspect to the north, west and east and a partially open aspect to the south.

To the southwest a new hedgerow is proposed around field K8.

To the east a new hedgerow is proposed around field K13 and K14.

To the south, the existing buildings will predominantly screen views of the development beyond.

Although the experience of the views to the ground floor areas are to be affected by the development, the sensitivity is lower than a residential dwelling and the viewpoint is already strongly influenced by the nature of the business activity in this area, with noise, traffic, dust etc within close proximity within the Racetrack.

By Year 1 views of the development will be curtailed to some degree as implemented mitigation will be immature and will have limited physical and visual impact by this point.

#### Lighting

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

# **Operation (Year 15)**

The first detailed designs were produced in tandem with consultation with residential property owners where this was requested by the owner. This consultation included both site and desk-based work to determine any direct impacts and suitable mitigation measures. Specific mitigation measures applicable to R09 are set out below:

The requirement for mitigation relates to visibility to the north, southwest, south and east.

A new hedgerow around the Site to the east and to the southwest of this building (fields K13, 14 and K8) will mitigate views from this facility. The new hedgerows are likely to have reached a height of 3.5m at Year 15 with the proposed hedgerow trees, irregularly spaced along these hedgerows reaching a height of 7.5m.

Views south are predominantly curtailed by existing buildings (R10) and existing vegetation. This is relating to visibility to the north, west, south and east.

All planting areas would be offset to a maximum of 50m from the property boundary.

By Year 15, views into the Site will be closed down and the substation will be screened by the proposed Mitigation with this receptor being more enclosed in nature from what is currently an exposed site.

The assessment process has considered the visual amenity of this residential property and has taken into account views anticipated from both the ground and first floors. Where significant effects have been identified for Year 1 these have been found to be less than significant at Year 15 due to the proposed landscape mitigation both from ground and first floors. At Year 15 in the consideration that a separate Residential Visual Amenity Assessment (RVAA) may be required, the findings for this receptor therefore show that the proposed landscape mitigation will screen views from the ground floor principal rooms and aa such an RVAA is therefore not considered to be necessary.

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Without Secondary
Mitigation having been
applied throughout the
scheme, the only change to
the views/landscape
following decommissioning
would be the existing
hedgerows which will have
been allowed to grow out
and will have been managed
to a height of 5m. It is
assumed that these will be
retained.

With Mitigation, the negative effects of the physical decommissioning will be balanced out by the long-term landscape and visual effects of this mitigation.



Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>
Level of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Magnitude	Very Low	Very Low	Low	Very Low
	Cold Harbour and the proposed construction access.  Cable Route Corridor The residential receptor is outside of the 500m cable route corridor study area.  Substation/s The residential receptor is within the 2km study area for the Cottam 3a substation and the substation is potentially visible to the south due to limited intervening vegetation.			

In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	There would be the introduction of new elements and features comprising the solar panel areas and the substation area.
	Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
	Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
	Overall Landscape Character and Visual Amenity





		Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
Magnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant



# Residential Receptor - R10 - Cold Harbour

# **Receptor Baseline:**

Collection of outbuildings with parking and access tracks with no clearly defined aspect or outlook. The immediate curtilage to the outbuildings has a partially open aspect towards the north and the Blyton Park Driving Centre (R09) and an open aspect towards the south with a mature belt of scrub and tree cover beyond. There is an open aspect towards the west and east.

**Type:** Singular building

Distance to Cottam Sites: 86m to Cottam 3a

Closest settlement: Northorpe at about 1.3km east

## **Description of Receptor:**

Non-residential receptor. The views from this receptor are low level, being pedestrians/workers and drivers. Surrounding views include the racetrack to the northwest, additional buildings to the north and southeast with a burial ground beyond the racetrack to the northwest.

## Nearest Viewpoint: VP60

The view is located on the B1025 (Kirton Road) at the entrance to the Blyton Park Driving Centre, looking northwest directly over the Cottam 3a Site and southwest towards the Cottam 3b Site, with the Cottam 2 Site beyond

The view is influenced by the open nature of the location and the presence of the Blyton Park Driving Centre and its associated hanger, access roads and parking areas. Although Kirton Road is defined by strong hedgerows they are low-cut and the hedgerow trees are weak and this gives an uncomfortable feeling to the route, especially given that it is a long straight road with fast moving traffic and no footways, with only narrow grass verges. The existing vegetation bordering the mainline railway is the appealing feature of the view along with the dense shelterbelt vegetation between the field systems which provides effective screening in this direction. The wind turbine on the Site/Sites is prominent from this viewpoint, but the low scrub in the foreground helps to mitigate its presence. The viewpoint offers some interesting but highly detracting features locally, that are evident in sharp contrast to the more invigorating views out towards the surrounding landscape of Laughton Woods and Laughton Common as a strong wooded horizon. The overall experience is that of an unsettling location with overwhelming feelings of insecurity. The distant electricity pylons and the sporadic buildings, signage and gateway fencing in the foreground also add to the discordancy and uncomfortable nature of the view.

### **Sensitivity:** *High*

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



including planting and the

#### Residential Receptor - R10 / Cold Harbour Construction **Operation (Year 1) Operation (Year 15) Decommissioning** Views of the construction will There are no first-floor windows to these The first detailed designs were produced in tandem with consultation with A similar process to that of construction stage, but be predominantly available to residential property owners where this was requested by the owner. This with the Scheme being no longer operational. This building which is not a dwelling, but a is an assessment of the Site in winter but assumes the southwest, south and east consultation included both site and desk-based work to determine any direct collection of industrial buildings associated at the closest distance with impacts and suitable mitigation measures. Specific mitigation measures applicable retention of existing vegetation and builds upon with the racetrack. views further southwest are to R10 are set out below: the proposed primary and secondary mitigation somewhat screened beyond that had been established as the future baseline. Effects are those arising from activities for the the intervening panelled areas. There are no ground floor windows to this The requirement for mitigation relates to visibility to the north, west, south and duration of the decommissioning to include site building, but the curtilage has an open Views are already somewhat traffic, noise and vibration from decommissioning aspect to the north, south and east and a degraded by the existence of A new hedgerow around the Site to the east, southeast and to the southwest of this activities, dust generation and site runoff. partially open aspect to the west where the racetrack and associated building (fields K13, 14, 16 and K8) will mitigate views from this facility. The new some vegetation exists adjacent to the infrastructure and remnant hedgerows are likely to have reached a height of 3.5m at Year 15 with the proposed **Without** Secondary Mitigation having been airfield structures. hedgerow trees, irregularly spaced along these hedgerows reaching a height of applied throughout the scheme, the only change buildings. to the views/landscape following decommissioning The changes would include the would be the existing hedgerows which will have To the southwest a new hedgerow is proposed around construction activities during Panels are to be set back from the boundaries being 8m beyond proposed been allowed to grow out and will have been managed to a height of 5m. It is assumed that site preparation / enabling hedgerows. works, construction, and these will be retained. To the east a new hedgerow is proposed around field By Year 1 views will be curtailed, whilst by Year 15, views into the Site will be closed commissioning with effects K13 and K14. such as construction traffic, With Mitigation, the negative effects of the Although the experience of the views to the ground physical decommissioning will be balanced out by noise and vibration from floor areas are to be affected by the development, the The assessment process has considered the visual amenity of this residential the long-term landscape and visual effects of this construction activities, dust sensitivity is lower than a residential dwelling and the generation, site runoff, mud on property and has taken into account views anticipated from both the ground and mitigation. viewpoint is already strongly influenced by the nature roads, and the visual intrusion first floors. Where significant effects have been identified for Year 1 these have of the business activity in this area, with noise, traffic, of plant and machinery on site. been found to be less than significant at Year 15 due to the proposed landscape dust etc within close proximity within the Racetrack. At the early stages of the mitigation both from ground and first floors. At Year 15 in the consideration that a construction stage, ground and separate Residential Visual Amenity Assessment (RVAA) may be required, the By Year 1 views of the development will be curtailed to lower-level activities such as findings for this receptor therefore show that the proposed landscape mitigation some degree as implemented mitigation will be will screen views from the ground floor principal rooms and aa such an RVAA is the construction of the immature and will have limited physical and visual therefore not considered to be necessary. substation, solar panel areas impact by this point. and associated infrastructure and inverters would be **Lighting** evident. During the latter part Lighting will be limited to downlights within of the construction stage, views substations and battery banks only and used when would become available of the maintenance or security is required. Lighting will be elevated activities above the PIR operated and will be calibrated to vehicle and hedgerows. personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls Other works would be fitted to prevent light spillage. Lighting required within undertaken in connection with panelled areas will be manually operated. There will be the construction including no lighting on perimeter fencing. fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works,



	improvement of the			
	foreground hedgerows.			
	These short-lived construction			
	activities Would be evident in			
	the close-mid range views.			
	There would be a change to			
	the arable land use, but the			
	field boundaries and the			
	associated tree cover would			
	remain intact. There would be			
	a change to the arable land use			
	around this receptor, but the field boundaries and the			
	associated tree cover would			
	remain intact. The immediate			
	surroundings to this building			
	would not alter and there			
	would be no fundamental			
	change to the surroundings to			
	the northwest.			
	Construction Access			
	The residential receptor will			
	not be affected by construction traffic due to the distance			
	between Cold Harbour and the			
	proposed construction access.			
	Cable Route Corridor			
	The residential receptor is			
	ooutside the 500m cable route			
	corridor study area.			
	Substations			
	The residential receptor is			
	within the 2km study area for			
	the Cottam 3a substation.			
Magnitude	Very Low	Very Low	Low	Very Low
Level of	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Effect				
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>



	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
		, community of the state of the
	No Intervisibility	Fabric of the Landscape
		There would not be the removal of or changes in individual elements or features of the landscape within the character
		area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area.
		Aesthetic Aspects of the Landscape
		Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the
		cumulative developments would not be experienced across the majority of the 5km study area. This is due to the
		distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
		built form would also curtail cumulative visibility between triese site/sites.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site
		and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity
		Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a
		strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive
		landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east
		to west and a more strategic road network north to south. These relevant characteristics of the landscape have some
		ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not
		alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
		Construction: Low
		Operation (Year 1): Low
Magnitude	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Low
		Operation (Year 15): Low
		Decommissioning: Low
		Construction: Adverse & Short Term
Type of	Not Applicable	Operation (Year 1): Adverse & Long Term
Effect	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
		Operation (Year 15): Neutral & Long Term
		Decommissioning: Neutral & Short Term  Construction: Minor <b>Not Significant</b>
		Operation (Year 1): Minor <b>Not Significant</b>
Significance		Operation (Year 1): with only Embedded Mitigation: Minor Not Significant
of Effect	Not Applicable	Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Minor <b>Not Significant</b>





[Reference: EN010133/APP/C6.3.8.3.3.3.3] January 2023

# Residential Receptor - R13 / Blue Bell Farm

# **Receptor Baseline:**

Farmstead (Blyton Grange) with extensive collection of outbuildings, agricultural buildings, access tracks, parking, and storage areas. Main dwelling has south and east faced aspect with additional outbuildings that are north and east facing. There are woodlands and hedgerows to the north, west and east boundaries. There is a partially open aspect to the south with some garden planting and a wall, but with a further tall conifer hedgerow beyond.

**Type:** Group of buildings

Distance to Cottam Sites: 97m to Cottam 3a

**Closest settlement:** Blyton at about 60m southwest

# **Description of Receptor:**

This group of buildings comprises Blyton Grange and Blue Bell Farm. The dwelling at Blyton Grange lies adjacent to field K5. Farm buildings sit further west and south. Bluebell farm lies further west adjacent to the Laughton Road and its adjacent to the driveway which heads south from the Laughton Road. A strong hedgerow lies to the east of the site at Bluebell Farm. Boundaries around the buildings and dwelling at Blyton Grange are variable with some strong hedgerows and other open areas that require mitigation.

### **Nearest Viewpoint:** VP63

The view is located on the A159 (Laughton Road), looking east directly over the Cottam 3a Site and southeast towards the Cottam 3b Site with the Cottam 2 Site beyond.

The view is influenced by the semi-open nature of the location and the visual relationship with the Wooded Vales at Laughton to the west. The A159 is defined by strong hedgerows which are low-cut where the hedgerow trees give some pleasant visual interest to the route (given that it is fast moving traffic and no footways). The small woodland block to the west boundary of the Site/Sites is evident from this viewpoint on the horizon along with the nearby conifer shelter belt. The viewpoint offers bland and unsettling features locally, but the wider context encapsulates the landscape to the east comprising the Wooded Vales at Laughton. The overall experience is that of a busy location with overwhelming feelings of discomfort due the presence of the A159, but the Laughton Woods and the northern edges of Blyton are distinctive features that raise the overall quality of the view and add some 'sense of place'.

Sensitivity: High

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



# Residential Receptor - R13 / Blue Bell Farm

Construction

# ......

The south and east facing first floor outlooks would be significantly affected by development but the existing vegetation is likely to screen some views to the east and the southeast whilst views to the southwest are currently degraded by agricultural/industrial buildings and hardstanding/storage areas. There are no views to the north.

The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground and lower-level activities such as the construction of the substation, solar panel areas and associated infrastructure and inverters would be evident from the first-floor outlook, but the ground floor would benefit from the intervening hedgerows and tree and shrub cover within the garden, and also an established hedge to the southeast of the dwelling and further hedges to the west of the farmyard area. During the latter part of the construction stage, views would become available of the elevated activities above the garden hedgerows. Due to the presence of tree cover in the east of the garden, the works would benefit from screening, such that these activities would

# **Operation (Year 1)**

The property has views over the Site to the south, east and west. There are no views to site to the north. This property is on the northwestern extents of Cottam 3a with only one field (K1) to the west.

The principal first floor south facing windows would experience views over the area of panels but these would be set back from the boundary by 50m and would be seen within the context of the existing agricultural /industrial buildings to the south and southwest.

Views from the east facing first floor windows will be partially filtered by the existing garden vegetation and a further 50m buffer from this boundary. More open views exist to the southeast where the property overlooks the farmland beyond the curtilage of the property.

To the north, the views will not be affected.

To the west, the panelled area will be visible beyond the intervening hedgerows and the farmyard to the east of field K1.

Close range views to the southeast, east and south would comprise an area of grassland with the new hedgerows to fields K5 a minimum of 50m beyond. This hedgerow will be immature at this point.

There will be views to the substation to the southeast over the former airfield where field boundaries have been lost.

### Lighting

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

# **Operation (Year 15)**

The first detailed designs were produced in tandem with consultation with residential property owners where this was requested by the owner. This consultation included both site and desk-based work to determine any direct impacts and suitable mitigation measures. Specific mitigation measures applicable to R13 are set out below:

The requirement for mitigation relates to visibility to the south and east.

There will be a new hedgerow to the south of Bluebell Farm within field K1. New hedgerows will also exist to the eastern boundary of Blyton Grange and an existing field boundary to the east of field K1 will be enhanced and allowed to grow out and managed to a height of 5m. Additional hedgerow trees planted within this hedge will have grown to a height of some 7.5m whilst the new hedging is likely to have reached 3.5m.

By Year 15, the views into the Site will be closed down with agricultural buildings still visible amongst hedges and hedgerow trees.

A belt of scattered trees to the south of fields K1 ad K2 will add to the tree cover locally.

Panels will be set back 50m from the boundaries and will be a minimum of 8m from adjacent vegetation.

The assessment process has considered the visual amenity of this residential property and has taken into account views anticipated from both the ground and first floors. Where significant effects have been identified for Year 1 these have been found to be less than significant at Year 15 due to the proposed landscape mitigation both from ground and first floors. At Year 15 in the consideration that a separate Residential Visual Amenity Assessment (RVAA) may be required, the findings for this receptor therefore show that the proposed landscape mitigation will screen views from the ground floor principal rooms and as such an RVAA is therefore not considered to be necessary.

# Decommissioning

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

**Without** Secondary Mitigation having been applied throughout the scheme, the only change to the views/landscape following decommissioning would be the existing hedgerows which will have been allowed to grow out and will have been managed to a height of 5m. It is assumed that these will be retained.

**With Mitigation**, the negative effects of the physical decommissioning will be balanced out by the long-term landscape and visual effects of this mitigation.



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		[Reference: EN	No10133/APP/C6.3.8.3.3.3.3] January 2023
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B1205 having 2 points of			
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	Cable Route Corridor The Residential receptor is outside of the 500m cable route corridor study area and there would be no views of this route.  Substation/s Residential receptor is within the 2km study area and there would be mid-distance views of the substation at Cottam 3a.			
Magnitude	Very Low	Very Low	Low	Very Low
Level of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

Residential R	esidential Receptor – R13 / Blue Bell Farm		
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	No Intervisibility	<u>Fabric of the Landscape</u> There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area.	
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.	
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:	
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]	
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.	
Magnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low	
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term	



Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.3.3: Residential Receptors – Residential Not Significant [Reference: EN010133/APP/C6.3.8.3.3.3.3] January 2023

Significance	Not Applicable	Construction: Minor <b>Not Significant</b> Operation (Year 1): Minor <b>Not Significant</b> Operation (Year 1): with only Embedded Mitigation: Minor <b>Not Significant</b>
of Effect		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Minor <b>Not Significant</b>



[Reference: EN010133/APP/C6.3.8.3.3.3.4] January 2023

# Residential Receptor - R19 / Cottam 3b

# **Receptor Baseline:**

Large-scale agricultural buildings with access track from Kirton Road to the south. No residential dwelling and the agricultural buildings have a southwest main frontage and entrance. There are hedgerows to the south, west and part-east boundaries of the site.

**Type:** Group of buildings

Distance to Cottam Sites: 752m to Cottam 3b

Closest settlement: Blyton at about 60m west

# **Description of Receptor:**

Large-scale agricultural buildings with no residential dwelling forming part of the old airfield landscape. Pedestrian/farm machinery use with views out at predominantly 1.5 - 2.2m.

### Nearest Viewpoint: LCC-C-T

The view is located Kirton Road, looking northeast directly over the Cottam 3a Site and southeast towards the Cottam 3b Site. The view is also looking south towards the Cottam 2 Site with the Cottam 1 North Site beyond. The view is influenced by the open nature of the location and the visual relationship between the heart of the settlement at the war memorial and this location. Although Kirton Road is defined by strong hedgerows they are low-cut, but the hedgerow trees are strong and this gives some visual comfort to the route (given that it is a long straight road with fast moving traffic and no footways, with only narrow grass verges). The existing vegetation bordering the mainline railway is the appealing feature of the view along with the views to the heart of the settlement. The small woodland block to the west boundary of the Site/Sites is prominent from this viewpoint on the horizon and the nearby conifer shelter belt just falls below the horizon behind the intervening hedgerows. The viewpoint offers some interesting and attractive features locally, including intervisibility between the heart of the village and the landscape to the east. The overall experience is that of a pleasant location with overwhelming feelings of familiarity and comfort.

### Sensitivity: High

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Residential R	Residential Receptor – R19 / Cottam3b			
	Construction	Operation (Year 1)	Operation (Year 15)	Decommissioning
	Views of the construction will be available to the north, east and west in the closest distance with views to the south screened by existing predominantly evergreen vegetation. Views further southwest are beyond the intervening panelled areas.  Views are already somewhat degraded by the existence of the racetrack and associated infrastructure and remnant airfield structures.  The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground and lower-level activities such as the construction of the substation, solar panel areas and associated infrastructure and inverters would be evident. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerows.  Other works would be undertaken in connection with the construction including fencing,	There are no first-floor windows to these buildings which are not a dwelling but agricultural barns.  There are no ground floor windows to these buildings, but the curtilage has an open aspect to the north, west and east. The southern and southwestern boundaries are screened by tall existing vegetation.  Although the experience of the views to the ground floor areas are to be affected by the development, the sensitivity is lower than a residential dwelling and the viewpoint is already strongly influenced by the nature of the business activity in this area, with	The first detailed designs were produced in tandem with consultation with residential property owners where this was requested by the owner. This consultation included both site and desk-based work to determine any direct impacts and suitable mitigation measures. Specific mitigation measures applicable to R19 are set out below:  The requirement for mitigation relates the north, west and east over the Cottam 3a Site from this building. Existing strong and tall coniferous hedges exist to the southern boundaries and to part of the eastern and western extents.  A new hedgerow to the east and west there would be new native hedgerows with irregularly spaced hedgerow trees on the boundaries of the Site and adjoining the existing vegetation to the southern part of site on which this group of farm buildings sits.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and
	gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities Would be evident in the close-mid range views. There would be a change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would be a change to the arable land use around this receptor, but the field boundaries and the associated tree cover would remain intact. The immediate surroundings to this building would not alter and there would be no fundamental change to the surroundings to the northwest.  Construction Access  There would be no view of any construction access from this viewpoint, however the Kirton Road would be busier due to the two site accesses to the west and east of this receptor.  Cable Route Corridor  This Residential receptor is inside the 500m cable route corridor study area but views would be limited by existing vegetation to the south east of the receptor.  Substation/s  This Residential receptor is within the 2km study areas for both Cottam 3a substation and Cottam 3b substation. There would be views across to the southeast of Cottam 3a substation.	noise, traffic, dust etc within close proximity within the Racetrack.  By Year 1 views of the development will be curtailed to some degree as implemented mitigation will be immature and will have limited physical and visual impact by this point.  Lighting Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.	These hedgerows are likely to reach a maximum height of 3.5m at Year 15 and will ultimately be allowed to grow out to 5m. The hedgerow trees are likely to reach a height of 7.5m.  No planting is required to the south adjacent to Kirton Road, with existing evergreen vegetation screening views of the Cottam 3b Site.  Panels set back from the boundary of the agricultural site.  The assessment process has considered the visual amenity of this residential property and has taken into account views anticipated from both the ground and first floors. Where significant effects have been identified for Year 1 these have been found to be less than significant at Year 15 due to the proposed landscape mitigation both from ground and first floors. At Year 15 in the consideration that a separate Residential Visual Amenity Assessment (RVAA) may be required, the findings for this receptor therefore show that the proposed landscape mitigation will screen views from the ground floor principal rooms and as such an RVAA is therefore not considered to be necessary.	without Secondary Mitigation having been applied throughout the scheme, the only change to the views/landscape following decommissioning would be the existing hedgerows which will have been allowed to grow out and will have been managed to a height of 5m. It is assumed that these will be retained.  With Mitigation, the negative effects of the physical decommissioning will be balanced out by the long-term landscape and visual effects of this mitigation.
Magnitude	Very Low	Very Low	Low	Very Low
Level of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible Not Significant	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

Residential R	Residential Receptor – R19 / Cottam3b			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area.		
		Aesthetic Aspects of the Landscape  Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]		
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.		
Magnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low		
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	Not Applicable	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant		



[Reference: EN010133/APP/C6.3.8.3.3.3.5] January 2023

# Residential Receptor - R20 / The Fields Farm

# **Receptor Baseline:**

Farmstead with two dwellings comprising 'The Fields' to the north and 'The Cottage' to the south. There are agricultural buildings with hard standing and access tracks to the south of 'The Cottage' known as 'The Fields Farm'. There is a strong hedgerow to the west boundary of the garden curtilages and strong hedge to the north side of Kirton Lane. There is further woodland and tree cover bordering the mainline railway to the south. 'The Cottage' has open aspect to the north, south and east, but the agricultural buildings at 'Fields Farm' close down any visibility to the south along with the tree cover along the mainline railway, intervening field boundaries and the hedgerows along Kirton Road.

**Type:** Group of buildings

Distance to Cottam Sites: 168m to Cottam 3a

Closest settlement: Blyton at about 60m west

### **Description of Receptor:**

Principal ground floor windows of the Fields face north over the garden towards a low hedged boundary to Kirton Road. There is a taller native hedge to the northern boundary of the Kirton Road on the southern boundary of the agricultural buildings with conifer hedging beyond. Beyond, the conifer hedge adjacent to the agricultural building to the north of Kirton Road partially block views, obscuring views to the north and northeast, whilst a low hedge allows views directly over the Site of Cottam 3a. The principal first floor windows also look north over the Site to the north/northeast.

The Cottage sits to the south of Field Cottage set back from the Kirton Road, looking north over a garden area towards Field Cottage. The farm buildings sit further south. There is a low native hedge to the western boundary of these buildings with more sparce planting to the east. There is a low hedge along the southern extents of the Kirton Road. There are limited oblique views to the northwest from both of these properties due to the existing vegetation and landform.

# Nearest Viewpoint: LCC-C-T

The view is located Kirton Road, looking northeast directly over the Cottam 3a Site and southeast towards the Cottam 3b Site. The view is also looking south towards the Cottam 2 Site/Sites with the Cottam 1 North Site beyond.

The view is influenced by the open nature of the location and the visual relationship between the heart of the settlement at the war memorial and this location. Although Kirton Road is defined by strong hedgerows they are low-cut, but the hedgerow trees are strong and this gives some visual comfort to the route (given that it is a long straight road with fast moving traffic and no footways, with only narrow grass verges). The existing vegetation bordering the mainline railway is the appealing feature of the view along with the views to the heart of the settlement. The small woodland block to the west boundary of the Site/Sites is prominent from this viewpoint on the horizon and the nearby conifer shelter belt just falls below the horizon behind the intervening hedgerows. The viewpoint offers some interesting and attractive features locally, including intervisibility between the heart of the village and the landscape to the east. The overall experience is that of a pleasant location with overwhelming feelings of familiarity and comfort.

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



#### Residential Receptor - R20 / The Fields Farm Construction **Operation (Year 1) Operation (Year 15)** Decommissioning The changes would include the construction activities during Lighting The first detailed designs were produced in tandem with consultation with A similar process to that of site preparation / enabling works, construction, and Lighting will be limited to downlights within residential property owners where this was requested by the owner. This construction stage, but with the commissioning with effects such as construction traffic, noise substations and battery banks only and used consultation included both site and desk-based work to determine any Scheme being no longer and vibration from construction activities, dust generation, site when maintenance or security is required. direct impacts and suitable mitigation measures. Specific mitigation operational. This is an runoff, mud on roads, and the visual intrusion of plant and Lighting will be PIR operated and will be measures applicable to R20 are set out below: assessment of the Site in winter machinery on site. At the early stages of the construction stage, calibrated to vehicle and personnel movements. but assumes retention of existing All visible lighting would be 50W, installed at a The requirement for mitigation relates to visibility to the northeast and ground, and lower-level activities such as the construction of vegetation and builds upon the proposed primary and secondary the substation, solar panel areas and associated infrastructure maximum height of 4m with cowls fitted to east over the Cottam 3a Site from the first floor of the property, where the and inverters would be evident. During the latter part of the prevent light spillage. Lighting required within windows are mainly north focused. mitigation that had been construction stage, views would become available of the panelled areas will be manually operated. There established as the future elevated activities above the hedgerows. will be no lighting on perimeter fencing. Oblique visibility from upper floor of windows of 'The Fields' towards baseline. Effects are those arising Cottam 3a Site will be mitigated by enhancement of the existing low from activities for the duration of Other works would be undertaken in connection with the hedgerow to the north of the Kirton Road with irregularly spaced the decommissioning to include construction including fencing, gates, boundary treatment and hedgerow trees. Hedges are likely to have reached a height of 5m with site traffic, noise and vibration other means of enclosure and works for the provision of hedgerow trees reaching 7.5m by Year 15. A 10m wide successional scrub from decommissioning activities, security and monitoring measures such as CCTV and the laying belt will sit to the north of the enhanced hedgerow and is likely to have dust generation and site runoff. down of internal tracks. There would also be landscape and reached a height of 3.5m creating a strong buffer and taking panels 50m biodiversity mitigation works, including planting and the from the northern boundary of 'The Fields'. Without Secondary Mitigation having been applied throughout improvement of the foreground hedgerows. Limited and oblique visibility from 'The Cottage' due to boundary the scheme, the only change to **Construction Access** There would be views of the construction access from this hedgerows fronting Kirton Road and the land falling towards the south. the views/landscape following New planting along the south boundary of the 3a Site/Sites fronting Kirton viewpoint and the Kirton Road would become busier due to the decommissioning would be the two Site construction access points to the east and the west of Road will curtail visibility in Year 1 and close down views in Year 15. existing hedgerows which will have been allowed to grow out this receptor. and will have been managed to a The assessment process has considered the visual amenity of this Cable Route Corridor height of 5m. It is assumed that residential property and has taken into account views anticipated from Residential receptor is within the 500m cable route corridor these will be retained. both the ground and first floors. Where significant effects have been study area and there would be views of this route during identified for Year 1 these have been found to be less than significant at construction. **With Mitigation**, the negative Year 15 due to the proposed landscape mitigation both from ground and Substation/s effects of the physical first floors. At Year 15 in the consideration that a separate Residential This Residential receptor is within the 2km study areas for decommissioning will be Visual Amenity Assessment (RVAA) may be required, the findings for this Cottam 3a substation and Cottam 3b substation. There are balanced out by the long-term receptor therefore show that the proposed landscape mitigation will landscape and visual effects of potential views northeast to Cottam 3a substation. screen views from the ground floor principal rooms and aa such an RVAA is this mitigation. therefore not considered to be necessary. Magnitude Very Low Very Low Low Very Low Level of Neutral & Short Term Beneficial & Long Term Neutral & Long Term Neutral & Short Term Effect **Significance** Negligible **Not Significant** Minor-Moderate **Not Significant** Negligible **Not Significant** Negligible **Not Significant** of Effect



	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	in combination Effects [camalative sites]	cumulative Effects [cumulative Developments]
	No Intervisibility	Fabric of the Landscape
		There would not be the removal of or changes in individual elements or features of the landscape within the character
		area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area.
		Aesthetic Aspects of the Landscape
		Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the
		cumulative developments would not be experienced across the majority of the 5km study area. This is due to the
		distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and
		built form would also curtail cumulative visibility between these Site/Sites.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site
		and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity
		Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a
		strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive
		landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east
		to west and a more strategic road network north to south. These relevant characteristics of the landscape have some
		ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not
		alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
		Construction: Low
		Operation (Year 1): Low
Magnitude	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Low
		Operation (Year 15): Low
		Decommissioning: Low
		Construction: Adverse & Short Term
Type of		Operation (Year 1): Adverse & Long Term
Effect	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Ellect		Operation (Year 15): Neutral & Long Term
		Decommissioning: Neutral & Short Term
		Construction: Minor <b>Not Significant</b>
Significance		Operation (Year 1): Minor <b>Not Significant</b>
of Effect	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant
OI EIIECL		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Minor Not Significant



# Residential Receptor - R22 / Top Farm - Cottam 3a

### **Receptor Baseline:**

Farmstead with single dwelling to the north of the garden curtilage with its main aspect facing towards the south. There are agricultural buildings to the northwest of the dwelling and a tall, strong hedgerow to this boundary. There are also mature trees and shrubs to the south, west and east boundaries of the garden curtilage and there is further woodland and tree cover bordering both sides of the mainline railway to the south. The surrounding fields also support a strong hedgerow network with some tree cover. The dwelling has open views from the first-floor windows, but ground floor views are curtailed by the garden boundary vegetation.

**Type:** Singular building

Distance to Cottam Sites: 277m to Cottam 3a

Closest settlement: Blyton at about 1.4km west

# **Description of Receptor:**

The principal first floor windows face south over lawned gardens across areas of trees and shrubs. The first floor north facing windows look over the driveway and storage area with field boundaries close by and then the arable landscape beyond.

Overall, the views from the first-floor principal elevations are likely to capture the main visual interest over the surrounding enclosed garden looking towards the railway line and the surrounding landscape to the north and the ground floor principal windows are likely to capture immediate south facing views into the garden of the property.

### **Nearest Viewpoint:** VP59

The view is located on Blyton Level Crossing, looking southwest directly over the Cottam 3b Site and northwest over the Cottam 3a Site. The view is also looking south towards the Cottam 2 Site with Cottam 1 North Site beyond.

The view is influenced by the open nature of the location. The unnamed road is defined by strong hedgerows and hedgerow trees dotted informally and with the adjoining woodlands and shelterbelt at Bonsdale Farm this gives a comfortable and pleasant feeling to the route. The existing vegetation bordering the mainline railway also occupies the majority of the view and there is dense shelterbelt vegetation between the field systems to the north of the railway line which provides effective screening in this direction. The wind turbine on the Site/Sites is visible from this viewpoint. The viewpoint offers some interesting but detracting features locally, that are evident in sharp contrast with the more invigorating views out towards the surrounding landscape, which is open and exposed. The overall experience is that of a pleasant location with strong feelings of vigour and inspiration. The railway line is discordant in this otherwise balanced landscape.

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Negligible **Not Significant** 

of Effect

#### Residential Receptor - R22 / Top Farm - Cottam 3a **Operation (Year 1)** Construction **Operation (Year 15) Decommissioning** The changes would include the construction activities during site preparation / enabling A similar process to that of **Lighting** The first detailed designs were produced in tandem works, construction, and commissioning with effects such as construction traffic, noise and Lighting will be limited to downlights within with consultation with residential property owners construction stage, but with vibration from construction activities, dust generation, site runoff, mud on roads, and the substations and battery banks only and used where this was requested by the owner. This the Scheme being no longer visual intrusion of plant and machinery on site. At the early stages of the construction when maintenance or security is required. consultation included both site and desk-based work operational. This is an stage, ground and lower-level activities such as the construction of the substation, solar Lighting will be PIR operated and will be to determine any direct impacts and suitable assessment of the Site in panel areas and associated infrastructure and inverters would be evident. During the calibrated to vehicle and personnel mitigation measures. Specific mitigation measures winter but assumes latter part of the construction stage, views would become available of the elevated movements. All visible lighting would be 50W, applicable to R22 are set out below: retention of existing activities above the hedgerows. installed at a maximum height of 4m with vegetation and builds upon cowls fitted to prevent light spillage. Lighting The requirement for mitigation relates to visibility to the proposed primary and Other works would be undertaken in connection with the construction including fencing, required within panelled areas will be the north, towards the Cottam 3a Site from the first secondary mitigation that gates, boundary treatment and other means of enclosure and works for the provision of manually operated. There will be no lighting had been established as the floor of the property. security and monitoring measures such as CCTV and the laying down of internal tracks. future baseline. Effects are on perimeter fencing. There would also be landscape and biodiversity mitigation works, including planting and Intervening vegetation to the north helps to screen those arising from activities the improvement of the foreground hedgerows. views, but there will be an enhanced hedgerow to the for the duration of the north of the Kirton Road with irregularly spaced decommissioning to include Construction Access site traffic, noise and hedgerow trees. Hedges are likely to have reached a There would be possible views of the construction access from this viewpoint to the height of 5m with hedgerow trees reaching 7.5m by vibration from northeast and the Kirton Road would become busier due to the two Site construction Year 15. A 10m wide successional scrub belt will sit to decommissioning activities, dust generation and site access points to the east and the west of this receptor. the north of the enhanced hedgerow and is likely to have reached a height of 3.5m. runoff. Cable Route Corridor Residential receptor is within the 500m cable route corridor study area and there would be Further northeast, adjacent to the entrance to Blyton Without Secondary Park Racetrack, a bird mitigation field will sit behind views of this route during construction. Mitigation having been and existing hedgerow to the north of the Kirton Road. applied throughout the Substation/s Views to the northwest are obscured by existing scheme, the only change to vegetation and landform. the views/landscape This Residential receptor is within the 2km study areas for the Cottam 3a substation and the Cottam 3b substation. There are potential views north to Cottam 3a substation. following decommissioning By Year 15, all views will be obscured by the proposed would be the existing hedgerows which will have vegetation. been allowed to grow out and will have been managed The assessment process has considered the visual amenity of this residential property and has taken into to a height of 5m. It is account views anticipated from both the ground and assumed that these will be first floors. Where significant effects have been retained. identified for Year 1 these have been found to be less than significant at Year 15 due to the proposed With Mitigation, the landscape mitigation both from ground and first negative effects of the floors. At Year 15 in the consideration that a separate physical decommissioning Residential Visual Amenity Assessment (RVAA) may be will be balanced out by the required, the findings for this receptor therefore show long-term landscape and visual effects of this that the proposed landscape mitigation will screen views from the ground floor principal rooms and aa mitigation. such an RVAA is therefore not considered to be necessary. Magnitude Very Low Very Low Low Very Low **Level of** Neutral & Short Term Neutral & Short Term Neutral & Long Term Beneficial & Long Term Effect Significance

Negligible **Not Significant** 

Minor-Moderate Not Significant

Negligible Not Significant



# Residential Receptor - R22 / Top Farm - Cottam 3a **In-Combination Effects [Cumulative Sites] Cumulative Effects [Cumulative Developments]** Fabric of the Landscape No Intervisibility There would not be the removal of or changes in individual elements or features of the landscape within the character There would be the introduction of new elements and features comprising the solar panel areas and the substation area. Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites. There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures: Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Overall Landscape Character and Visual Amenity Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a. Construction: Low Operation (Year 1): Low Magnitude Not Applicable Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Type of Not Applicable Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Effect Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term Construction: Minor **Not Significant** Operation (Year 1): Minor Not Significant **Significance** Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Not Applicable of Effect Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant





Residential Receptor - R22 / Top Farm - Cottam 3b

### **Receptor Baseline:**

Farmstead with single dwelling to the north of the garden curtilage with its main aspect facing towards the south. There are agricultural buildings to the northwest of the dwelling and a tall, strong hedgerow to this boundary. There are also mature trees and shrubs to the south, west and east boundaries of the garden curtilage and there is further woodland and tree cover bordering both sides of the mainline railway to the south. The dwelling has open views from the first-floor windows, but ground floor views are curtailed by the garden boundary vegetation.

**Type:** Singular building

Distance to Cottam Sites: 95m to Cottam 3b

Closest settlement: Blyton at about 1.4km west

**Nearest Viewpoint:** VP59

The view is located on Blyton Level Crossing, looking southwest directly over the Cottam 3b Site and northwest over the Cottam 3a Site. The view is also looking south towards the Cottam 2 Site with the Cottam 1 North Site beyond.

The view is influenced by the open nature of the location. The unnamed road is defined by strong hedgerows and hedgerow trees dotted informally and with the adjoining woodlands and shelterbelt at Bonsdale Farm this gives a comfortable and pleasant feeling to the route. The existing vegetation bordering the mainline railway also occupies the majority of the view and there is dense shelterbelt vegetation between the field systems to the north of the railway line which provides effective screening in this direction. The wind turbine on the Site/Sites is visible from this viewpoint. The viewpoint offers some interesting but detracting features locally, that are evident in sharp contrast with the more invigorating views out towards the surrounding landscape, which is open and exposed. The overall experience is that of a pleasant location with strong feelings of vigour and inspiration. The railway line is discordant in this otherwise balanced landscape.

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



#### Residential Receptor - R22 / Top Farm - Cottam 3b Construction **Operation (Year 1) Operation (Year 15)** Decommissioning The changes would include the construction activities during site preparation / enabling The first detailed designs were produced in A similar process to that of **Lighting** works, construction, and commissioning with effects such as construction traffic, noise and Lighting will be limited to downlights tandem with consultation with residential property construction stage, but with the vibration from construction activities, dust generation, site runoff, mud on roads, and the within substations and battery banks owners where this was requested by the owner. Scheme being no longer operational. visual intrusion of plant and machinery on site. At the early stages of the construction only and used when maintenance or This consultation included both site and desk-This is an assessment of the Site in stage, ground and lower-level activities such as the construction of the substation, solar security is required. Lighting will be PIR based work to determine any direct impacts and winter but assumes retention of panel areas and associated infrastructure and inverters would be evident. During the operated and will be calibrated to vehicle suitable mitigation measures. Specific mitigation existing vegetation and builds upon latter part of the construction stage, views would become available of the elevated and personnel movements. All visible measures applicable to R22 are set out below: the proposed primary and secondary activities above the hedgerows. lighting would be 50W, installed at a mitigation that had been established maximum height of 4m with cowls fitted The requirement for mitigation relates to visibility as the future baseline. Effects are Other works would be undertaken in connection with the construction including fencing, to prevent light spillage. Lighting to the south, towards the Cottam 3b Site from the those arising from activities for the gates, boundary treatment and other means of enclosure and works for the provision of required within panelled areas will be duration of the decommissioning to first floor of the property. security and monitoring measures such as CCTV and the laying down of internal tracks. manually operated. There will be no include site traffic, noise and There would also be landscape and biodiversity mitigation works, including planting and lighting on perimeter fencing. Intervening dense vegetation to the south both vibration from decommissioning the improvement of the foreground hedgerows. within the curtilage of the property and along the activities, dust generation and site railway line screen views, but there will be runoff. enhanced successional scrub planting to the south **Construction Access** of the railway with panels set back from the Without Secondary Mitigation mainline railway frontage to the south. The 10m having been applied throughout the There would be no view of the construction access to Cottam 3b from this scheme, the only change to the wide successional scrub belt is likely to have viewpoint. reached a height of 3.5m. views/landscape following decommissioning would be the **Cable Route Corridor** The assessment process has considered the visual existing hedgerows which will have Viewpoint is within the 500m cable route corridor study area and there would been allowed to grow out and will amenity of this residential property and has taken be views of this route during construction. into account views anticipated from both the have been managed to a height of ground and first floors. Where significant effects 5m. It is assumed that these will be Substation/s have been identified for Year 1 these have been retained. This viewpoint is within the 2km study areas for Cottam 3a substation and found to be less than significant at Year 15 due to Cottam 3b substation. There are no views south to Cottam 3b substation. the proposed landscape mitigation both from With Mitigation, the negative effects of the physical decommissioning will ground and first floors. At Year 15 in the consideration that a separate Residential Visual be balanced out by the long-term Amenity Assessment (RVAA) may be required, the landscape and visual effects of this findings for this receptor therefore show that the mitigation. proposed landscape mitigation will screen views from the ground floor principal rooms and aa such an RVAA is therefore not considered to be necessary. Magnitude Very Low Very Low Low Very Low Level of Neutral & Short Term Neutral & Long Term Beneficial & Long Term Neutral & Short Term **Effect Significance** Negligible Not Significant Negligible Not Significant Minor-Moderate Not Significant Negligible Not Significant of Effect



# Residential Receptor - R22 / Top Farm - Cottam 3b **In-Combination Effects [Cumulative Sites] Cumulative Effects [Cumulative Developments]** Fabric of the Landscape No Intervisibility There would not be the removal of or changes in individual elements or features of the landscape within the character There would be the introduction of new elements and features comprising the solar panel areas and the substation area. Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites. There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures: Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Overall Landscape Character and Visual Amenity Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a. Construction: Low Operation (Year 1): Low Magnitude Not Applicable Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Type of Not Applicable Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term **Effect** Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term Construction: Minor **Not Significant** Operation (Year 1): Minor Not Significant **Significance** Operation (Year 1): with only Embedded Mitigation: Minor Not Significant of Effect Not Applicable Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant



[Reference: EN010133/APP/C6.3.8.3.3.3.8] January 2023

# **Residential Receptor - R23 / Blyton**

### **Receptor Baseline:**

Residential dwellings towards the eastern edge of the settlement of Blyton, which include those to the east side of Station Road, those to either side of Kirton Road and the dwellings at Meadow View and Irwin Road. The landscape supports a good network of tree and hedgerow cover, including the vegetation to both sides of the mainline railway and the riparian vegetation bordering the Laughton Highland Drain, which form a significant screen. There are also intervening fields with a strong hedgerow network and occasional tree cover.

**Type:** Town or Village

Distance to Cottam Sites: 807m to Cottam 3a

### **Description of Receptor:**

Dwellings to the east of Irwin Road look east across to the Site towards K3, 4 and 7 whilst those north of the road look directly north towards fields K1 and K2 with limited garden boundary vegetation.

These properties face varying directions with most principal views looking towards the access roads with only 2 houses on Irwin Road having views directly north. Again, dwellings to the north of Meadow Rise vary in their perspective with two facing north/south.

Dwellings along the Kirton Road look north/south onto the Kirton Road with occasional gable end windows which may look out towards the east. Dwellings along Station Road have east/west perspectives with rear garden views looking east across their own and adjacent garden boundaries.

Nearest Viewpoint: VP62 / LCC-C-R / LCC-C-S

<u>VP62 – B1025 (Kirton Road):</u> The view is located on the B1025 (Kirton Road) just east of the junction with Station Road, looking northeast towards the Cottam 3a Site and southwest towards the Cottam 3b Site. The view is also looking south towards the Cottam 2 Site with the Cottam 1 North Site beyond.

The view is influenced by the open nature of the location and the visual relationship between the heart of the settlement at the war memorial and this location. Although Kirton Road is defined by strong hedgerows they are low-cut, but the hedgerow trees are strong and this gives some visual comfort to the route (given that it is a long straight road with fast moving traffic and no footways, with only narrow grass verges). The existing vegetation bordering the mainline railway is the appealing feature of the view along with the views to the heart of the settlement. The small woodland block to the west boundary of the Site/Sites is prominent from this viewpoint on the horizon and the nearby conifer shelter belt just falls below the horizon behind the intervening hedgerows. The viewpoint offers some interesting and attractive features locally, including intervisibility between the heart of the village and the landscape to the east. The overall experience is that of a pleasant location with overwhelming feelings of familiarity and comfort.

LCC-C-R – A159: The view is located along the A159 (Gainsborough Road) at the bridge crossing over the mainline railway, looking northeast towards the Cottam 3b Site.

The open, arable landscape gives a harsh appearance to the view, but the deciduous woodland blocks and vegetation along the railway line are also very prominent and attractive features in the landscape. This is an interesting view that is far-reaching with a complex mixture of elements including the prominent vegetation cover to each side of the railway line.

LCC-C-S – ProW Blyt/24/2: This is an enclosed landscape that supports numerous hedgerows with strong tree cover all which gives an attractive appearance to the view. The deciduous woodland blocks and vegetation along the railway line are also very prominent and attractive features in this landscape. This is an interesting view that is enclosed and intimate with a complex mixture of attractive features including the prominent vegetation cover to each side of the railway line.

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



# Residential Receptor - R23 / Blyton

#### Construction **Operation (Year 15) Operation (Year 1) Decommissioning** The changes would include the **Lighting** The first detailed designs were produced in tandem with consultation with A similar process to that of construction stage, but construction activities during Lighting will be limited to downlights within residential property owners where this was requested by the owner. This with the Scheme being no longer operational. This site preparation / enabling substations and battery banks only and used when consultation included both site and desk-based work to determine any direct is an assessment of the Site in winter but assumes works, construction, and maintenance or security is required. Lighting will be impacts and suitable mitigation measures. Specific mitigation measures applicable retention of existing vegetation and builds upon commissioning with effects PIR operated and will be calibrated to vehicle and to R23 are set out below: the proposed primary and secondary mitigation such as construction traffic, personnel movements. All visible lighting would be that had been established as the future baseline. noise and vibration from 50W, installed at a maximum height of 4m with cowls The requirement for mitigation relates to visibility to the north and east over the Effects are those arising from activities for the fitted to prevent light spillage. Lighting required within Cottam 3a Site from the first floors of properties to the eastern extents of the duration of the decommissioning to include site construction activities, dust generation, site runoff, mud on panelled areas will be manually operated. There will be village of Blyton. traffic, noise and vibration from decommissioning roads, and the visual intrusion no lighting on perimeter fencing. activities, dust generation and site runoff. of plant and machinery on site. The existing hedgerow to the west of the Site within fields K3 and K4 is to be Without Secondary Mitigation having been enhanced with the addition of irregularly spaced native hedgerow trees. The At the early stages of the existing hedge is likely to have reached a height of 5m with hedgerow trees construction stage, ground and applied throughout the scheme, the only change lower-level activities such as reaching 7.5m in height. Beyond this, a belt of successional scrub (30m wide at its to the views/landscape following decommissioning the construction of the southern extents) will have reached a height of 3.5m creating a strong buffer and would be the existing hedgerows which will have substation, solar panel areas setting panels well back from the boundary. been allowed to grow out and will have been and associated infrastructure managed to a height of 5m. It is assumed that and inverters would be To the north (and on the southern boundary of field K1 and K2) the 5m wide these will be retained. evident. During the latter part scattered tree belt will have reached a height of 7.5m with the existing hedgerow of the construction stage, views With Mitigation, the negative effects of the creating the dense subcanopy layer. would become available of the physical decommissioning will be balanced out by elevated activities above the Panels are set back from these boundary of the Cottam 3a Site. the long-term landscape and visual effects of this hedgerows. mitigation. Existing and proposed planting will curtail visibility in year 1 and close down Other works would be visibility in Year 15. undertaken in connection with the construction including Views towards the Cottam 3b Site are obscured by intervening field boundary fencing, gates, boundary vegetation and dense vegetation along the railway line. treatment and other means of enclosure and works for the The assessment process has considered the visual amenity of this residential property and has taken into account views anticipated from both the ground and provision of security and monitoring measures such as first floors. Where significant effects have been identified for Year 1 these have CCTV and the laying down of been found to be less than significant at Year 15 due to the proposed landscape internal tracks. There would mitigation both from ground and first floors. At Year 15 in the consideration that a also be landscape and separate Residential Visual Amenity Assessment (RVAA) may be required, the biodiversity mitigation works, findings for this receptor therefore show that the proposed landscape mitigation including planting and the will screen views from the ground floor principal rooms and aa such an RVAA is improvement of the therefore not considered to be necessary. foreground hedgerows. **Construction Access** The residential receptor will not be affected by construction traffic due to the distance between the centre of Blyton and the proposed construction access. The eastern edge of the settlement will be affected as Kirton road has two proposed construction access leading into the Cottam 3a Site.



	Cable Route Corridor This residential receptor is outside the 500m cable route corridor study area  Substations This residential receptor is within the 2km study areas for the Cottan 3a substation and the Cottam 3b substation.			
Magnitude	Very Low	Very Low	Low	Very Low
Level of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

Residential R	esidential Receptor – R23 / Blyton		
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	No Intervisibility	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area.  Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.  There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]  Overall Landscape Character and Visual Amenity Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some	
		ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a	
Magnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low	





Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant





[Reference: EN010133/APP/C6.3.8.3.3.3.9\_A] January 2023

# Residential Receptor - R25 / Glebe Farm

# **Receptor Baseline:**

Residential dwelling located to the northeast of the settlement of Pilham served by an access track off Station Road. The track is also a public footpath (Pilh/20/1). The dwelling is located to the northwest of the garden curtilage with outbuildings occupying the eastern part of the plot. The main outlook and aspect from the property is east west with a north facing gabled addition. The garden curtilage is fully enclosed with mature tree cover on all boundaries and there is an adjoining field hedgerow to the east of the property.

**Type:** Singular building

Distance to Cottam Sites: 161m to Cottam 3b

**Closest settlement:** Pilham at about 30m southwest

**Nearest Viewpoint:** VP56

The view is located on PRoW, footpath Pilh/20/1, looking southeast towards the Cottam 2 Site and northeast towards the Cottam 3b Site. The view is also looking south towards the Cottam 1 North Site.

The view is influenced by the skyline that is disrupted by tree clumps and mast poles. The footpath is enclosed by strong hedgerows and hedgerow trees dotted informally and with high canopies giving an open and safe feeling to the route. The existing vegetation bordering the mainline railway also occupies the background of the view and there is a dense shelterbelt vegetation which provides effective screening of Site/Sites, however the wind turbine on the Site/Sites is visible from this viewpoint. The location offers some interesting features locally, but with more invigorating views out towards the surrounding landscape, which is large scale and exposed.

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





# Residential Receptor - R25 / Glebe Farm

itial Receptor – R25 / Glebe Far	m		
Construction	Operation (Year 1)	Operation (Year 15)	Decommissioning
The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the substation, solar panel areas and associated infrastructure and inverters would be evident. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerows.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  Construction Access This receptor sits on the construction access road off the Pilham Road, and this route would become busy during construction.  Cable Route Corridor Viewpoint is outside the 500m cable route corridor study area	Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.	The first detailed designs were produced in tandem with consultation with residential property owners where this was requested by the owner. This consultation included both site and desk-based work to determine any direct impacts and suitable mitigation measures. Specific mitigation measures applicable to R25 are set out below:  The requirement for mitigation relates to visibility to the main outlook and aspect from the property that is east west aligned with a north facing gabled addition. The garden curtilage is fully enclosed with mature tree cover on all boundaries and there is an adjoining field hedgerow to the east of the property.  There will be a new hedgerow to the east of the Site of Cottam 3b which will take the development some 130m east of this dwelling. Existing north/south hedgerows around the Site also help to mitigate views across to the east. The new hedgerow is likely to have reached a height of 3.5m by Year 15, whilst hedgerow trees planted within it will be some 7.5m high.  Existing enhanced hedgerows across the Site (running north/south) will have been allowed to grow out and will have been managed at 5m high with additional tree species introduced reaching 7.5m.  A further 5m belt of successional scrub to the south of the railway line will further help to screen views of this feature, having reached an approximate height of 3.5m by Year 15.  The assessment process has considered the visual amenity of this residential property and has taken into account views anticipated from both the ground and first floors. Where significant effects have been identified for Year 1 these have been found to be less than significant at Year 15 due to the proposed landscape mitigation both from ground and first floors. At Year 15 in the consideration that a separate Residential Visual Amenity Assessment (RVAA) may be required, the findings for this receptor therefore show that the proposed landscape mitigation will screen views from the ground floor principal rooms and as such an RVAA is therefore not consid	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.  Without Secondary Mitigation having been applied throughout the scheme, the only change to the views/landscape following decommissioning would be the existing hedgerows which will have been allowed to grow out and will have been managed to a height of 5m. It is assumed that these will be retained.  With Mitigation, the negative effects of the physical decommissioning will be balanced out by the long-term landscape and visual effects of this mitigation.



	and there would be no view of this route.  Substation/s This viewpoint is within the 2km study area but there would be no view of the Substation at Cottam 3b due to the intervening vegetation.			
Magnitude	Very Low	Very Low	Low	Very Low
Level of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible Not Significant	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

ential Receptor – R25 / Glebe Farm	Receptor - R25 / Glebe Farm		
In-Combination Effects [Cumulative Sit	es] Cumulative Effects [Cumulative Developments]		
No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
	There would be the introduction of new elements and features comprising the solar panel areas and the substation a		
	Aesthetic Aspects of the Landscape Refer to <b>Figure 8.15.1.3 [C6.4.8.15.1.3]</b> which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements a built form would also curtail cumulative visibility between these Site/Sites.		
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:		
	Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]		
	Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads e to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would alter the overall character of the landscape within the Unwooded Vales Character Area 4a.		
tude Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low		





		Construction: Adverse & Short Term
Type of		Operation (Year 1): Adverse & Long Term
	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Effect		Operation (Year 15): Neutral & Long Term
		Decommissioning: Neutral & Short Term
		Construction: Minor Not Significant
Significance	Not Applicable	Operation (Year 1): Minor <b>Not Significant</b>
	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant
of Effect		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Minor <b>Not Significant</b>



# Residential Receptor - R35 / Hall Farm & Old Farm

# **Receptor Baseline:**

Hall Farm, Old Farm and Keeper's Cottage are all located to the north of the settlement of Corringham just to west of Bonsall Road. Hall Farm is located to the southwest of the plot with a south facing aspect that overlooks the woodland at Old Hall. There are large-scale agricultural buildings to the east of the plot with parking areas and hard standing. Keeper's Cottage is a two-story property, which overlooks Bonsall Road with its main elevation facing east towards Corringham Beck. Old Hall is located to the south of Hall Farm and is shrouded in tree cover all round its curtilage.

**Type:** Group of buildings

**Distance to Cottam Sites**: 400m to Cottam 2

**Closest settlement:** Corringham at about 30m south

### **Description of Receptor:**

Corringham Old Hall looks principally east/west but sits within a heavily wooded curtilage with access off Bonsall Road adjacent to Corringham Beck. There are unlikely to be any views out across to the east from this property. Keepers Cottage sits adjacent to the road and faces east with the principal garden aspects looking south and east. The garden is enclosed on all sides by low-cut hedges and contains some trees. The dwelling at Hall Farm sits behind large agricultural buildings which lie behind Keeper's Cottage with no apparent views out to the east.

### Nearest Viewpoint: LCC-C-P

This viewpoint is located on the unnamed road to the northeast of Corringham, looking directly east over the Cottam 2 Site and south towards the Cottam 1 North Site. The view is also looking north towards the Cottam 3b Site.

The unnamed road is a feature in the context of its grass verges, and the wider outlook is interesting with views extending east towards the limestone capped scarp slopes. Where there are distant views towards the skyline, they are often punctured by telegraph poles which appear dominant and consistent on the horizon. There is limited tree cover around Aisby to the north and therefore the residential properties stand out in the landscape. The overall experience is a calm and intact landscape, but the presence of poles and other man-made features exert a detracting influence. This is a quiet location with very little passing traffic.

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Residential Receptor - R35 / Hall Farm	& Old Farm		
Construction	Operation (Year 1)	Operation (Year 15)	Decommissioning
The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground and lower-level activities such as the construction of the substation, solar panel areas and associated infrastructure and inverters would be evident. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerows.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  Construction Access This residential receptor sits to the west of the construction access road off the Pilham Road and this route would become busy during construction.  Cable Route Corridor This residential receptor is outside of the 500m cable	Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.	The first detailed designs were produced in tandem with consultation with residential property owners where this was requested by the owner. This consultation included both site and desk-based work to determine any direct impacts and suitable mitigation measures. Specific mitigation measures applicable to R35 are set out below:  The requirement for mitigation relates to visibility to the east over the Cottam 2 Site from the first-floor windows at Keeper's Cottage. Ground floor views will be curtailed by existing vegetation either side of Bonsall Road. There will be shelterbelt planting to the western boundary of the Cottam 2 Site. At Year 1 this will be immature and by Year 15 these trees will have established and begun to mature and are likely to have reached a height of 7.5m. This will also predominantly obscure views of Corringham Grange Farm from the west.  A scattered tree belt will be seen to the northeast of these buildings which, due to its orientation will appear as a solid block of trees which are likely to have reached 7.5m in height.  There will be enhanced hedgerows along East Lane which are likely to have reached a height of 5m with hedgerow trees having reached some 7.5m high.  Panels will be set back from the Site boundary and away from Corringham Beck and East Lane.  The assessment process has considered the visual amenity of this residential property and has taken into account views anticipated from both the ground and first floors. Where significant effects have been identified for Year 1 these have been found to be less than significant at Year 15 due to the proposed landscape mitigation both from ground and first floors. At Year 15 in the consideration that a separate Residential Visual Amenity Assessment (RVAA) may be required, the findings for this receptor therefore show that the proposed landscape mitigation will screen views from the ground floor principal rooms and as such an RVAA is therefore not considered to be necessary.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.  Without Secondary Mitigation having been applied throughout the scheme, the only change to the views/landscape following decommissioning would be the existing hedgerows which will have been allowed to grow out and will have been managed to a height of 5m. It is assumed that these will be retained.  With Mitigation, the negative effects of the physical decommissioning will be balanced out by the long-term landscape and visual effects of this mitigation.



Magnitude Level of Effect Significance	Very Low  Neutral & Short Term  Negligible <b>Not Significant</b>	Very Low  Neutral & Long Term  Negligible Not Significant	Low  Beneficial & Long Term  Minor-Moderate Not Significant	Very Low  Neutral & Short Term  Negligible Not Significant
	route corridor study area and there would be no view of this route.  Substation/s This viewpoint is within the 2km study area for Cottam 2 substation but there would be no view of the substation due to the intervening vegetation and built form.			

I	n-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
N	lo Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.2 [C6.4.8.15.2.2]</b> which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character of the Unwooded Vales  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area.
/lagnitude N	lot Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low







SOLAR PROJECT		
		Construction: Adverse & Short Term
Type of		Operation (Year 1): Adverse & Long Term
	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Effect		Operation (Year 15): Neutral & Long Term
		Decommissioning: Neutral & Short Term
		Construction: Minor Not Significant
Significance	Not Applicable	Operation (Year 1): Minor <b>Not Significant</b>
	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant
of Effect		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Minor Not Significant

[Reference: EN010133/APP/C6.3.8.3.3.3.11] January 2023

# Residential Receptor - R60 / Glebe Farm

# **Receptor Baseline:**

Farmstead with single dwelling on a long, narrow plot off Willingham Road and with large scale agricultural buildings and some barn conversions. The main dwelling has a north south aspect with the front elevation facing over Willingham Road. The agricultural buildings occupy the plot to north of the main dwelling and close down any visibility in this direction. There is a further property (Greystones Farm) to the south side of Willingham Road which closes down views towards the south.

**Type:** Singular building

Distance to Cottam Sites: 88m to Cottam 1

Closest settlement: Fillingham at about 1.4km east

### **Description of Receptor:**

First floor views across fields beyond the Willingham Road are the principal outlook to the south. The property is bounded by a low-cut hedge adjacent to the Willingham Road with a number of mature Yew trees within the garden curtilage.

### Nearest Viewpoint: VP23

The view is located at the junction with PRoW Ingh/27/5 and Ingham Road looking directly south over the Cottam 1 South Site and north towards the Cottam 1 North Site.

The view is influenced by the open arable fields and the woodlands on the horizon that form a significant component and add balance to the landscape. The location offers some intimacy despite the open nature to the north due to the bordering hedgerows to each side of Ingham Road and the small woodland thicket (to the east) associated with the tributary of the River Till. The horizon closes down the view since the landform rises to a high point on Long Lane at approximately 20m AOD rising to 30m AOD at the edge of the settlement of Ingham. The overall experience is interesting and very pleasant, with some depth to views and strong contrasting features, and due to the presence of the plantation woodlands on the horizon and varied landform. Overall, Ingham Road is a strong feature in the view as it connects the settlements of Ingham in the east to Stow in the west, however the grass verges are a distinctive feature.

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





sidential Receptor – R60 / Glebe Far	m		
Construction	Operation (Year 1)	Operation (Year 15)	Decommissioning
The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground and lower-level activities such as the construction of the substation, solar panel areas and associated infrastructure and inverters would be evident. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerows.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  Construction Access This receptor sits to the north of the Willingham Road which provides construction access to the Site(s) at Cottam 1 and this route would become busy during construction.  Cable Route Corridor The Residential receptor is outside of the 500m study area	Lighting Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.	The first detailed designs were produced in tandem with consultation with residential property owners where this was requested by the owner. This consultation included both site and desk-based work to determine any direct impacts and suitable mitigation measures. Specific mitigation measures applicable to R60 are set out below:  The requirement for mitigation relates to visibility to the south, west and north over the Cottam 1 North Site from the first floor of the property, where the windows are mainly south focused.  To the south, there will be a 5m shelterbelt of trees directly opposite this dwelling which are likely to have reached a height of 7.5m by Year 15. This shelterbelt is set back some 140m south of the Willingham Road, taking development away from this property and Greystones Cottage which lies to the south of the road.  New hedgerows running broadly north/south within this part of the Site will provide additional tree cover locally and will help to break up the panelled areas in the midlong term.  Existing vegetation and Greystones Cottage help to obscure views further to the southwest, but a shelterbelt running broadly east/west and joining Larch Plantation will have grown to some 7.5m by Year 15 and will close down views of the larger part of the Cottam 1 Site/Sites.  Views north are obscured by existing agricultural buildings. Views from these buildings or within the Site will be screened by a new hedgerow to the south of fields B2 and B3 where this is likely to have reached a height of 3.5m with hedgerow trees within it being around 7.5m in height.  The assessment process has considered the visual amenity of this residential property and has taken into account views anticipated from both the ground and first floors. Where significant effects have been identified for Year 1 these have been found to be less than significant at Year 15 in the consideration that a separate Residential Visual Amenity Assessment (RVAA) may be required, the findings for this receptor therefore show that the proposed	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.  Without Secondary Mitigation having been applied throughout the scheme, the only change to the views/landscape following decommissioning would be the existing hedgerows which will have been allowed to grow out and will have been managed to a height of 5m. It is assumed that these will be retained.  With Mitigation, the negative effects of the physical decommissioning will be balanced out by the long-term landscape and visual effects of this mitigation.



Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>
Level of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Magnitude	Very Low	Very Low	Low	Very Low
	and there would be no view of this route.  Substation/s The receptor is outside the 2km study areas for the substations.			

In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	There would be the introduction of new elements and features comprising the solar panel areas and the substation area wi the character area
	Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the interver woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtain cumulative visibility.
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sit and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further deta within the following figures:
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east we minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and the have a major role in helping to define the quality of the landscape and reducing the visibility across the area.





		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
Magnitude	Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Negligible Not Significant





Residential Receptor - R65 / Lowfield Farm

### **Baseline Context:**

Farmstead with single dwelling occupying a long, narrow plot just off South Lane. The dwelling is located towards the western end of the plot and there are other outbuildings and barns to the south. The dwelling has an east west orientation, with the main front elevation facing west over mature tree cover and the east facing elevation looking out across a long narrow garden enclosed with mature tree cover and hedgerows. The woodland closes down any visibility towards the west, but there is a partially open aspect from the dwelling towards the east.

**Type:** Singular building

**Distance to Cottam Sites**: 146m to Cottam 1

Closest settlement: Coates at about 1.6km south

### **Description of Receptor:**

Lowfield Farm is set back from the road, its driveway coming directly off South Lane with open views west only visible along this driveway and elsewhere being obscured by existing mature vegetation.

# Nearest Viewpoint: VP38

The view is located on South Lane, looking south and west directly over, and east towards the Cottam 1 North Site. This is also looking south towards the Cottam 1 South Site.

The view is influenced by the woodlands on the horizon towards the east that form a significant component and add balance to the landscape. This location offers some intimacy since this is a local lane with little traffic and there is no major settlement to disrupt the tranquility. The field hedgerows are cut back, and the arable land use is intensively managed. The mature ash trees within the hedgerows are also a strong feature. The overall experience is pleasant, with some depth to views and strong contrasting features due to the presence of the plantation woodlands on the horizon and the slight undulations in topography. This is an isolated, remote location with a distinct absence of settlement, built form or other man-made features.

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





the west is also to be used

#### Residential Receptor - R65 / Lowfield Farm **Operation (Year 1)** Construction Operation (Year 15) Decommissioning The changes would include the The first detailed designs were produced in tandem with consultation with A similar process to that of construction stage, but Lighting with the Scheme being no longer operational. This construction activities during Lighting will be limited to downlights within residential property owners where this was requested by the owner. This site preparation / enabling substations and battery banks only and used when consultation included both site and desk-based work to determine any direct is an assessment of the Site in winter but assumes works, construction, and maintenance or security is required. Lighting will be impacts and suitable mitigation measures. Specific mitigation measures applicable retention of existing vegetation and builds upon commissioning with effects PIR operated and will be calibrated to vehicle and to R65 are set out below: the proposed primary and secondary mitigation such as construction traffic, personnel movements. All visible lighting would be that had been established as the future baseline. noise and vibration from 50W, installed at a maximum height of 4m with cowls The requirement for mitigation relates to visibility to the west over the Cottam 1 Effects are those arising from activities for the fitted to prevent light spillage. Lighting required within North Site (western sites). duration of the decommissioning to include site construction activities, dust generation, site runoff, mud on panelled areas will be manually operated. There will be traffic, noise and vibration from decommissioning no lighting on perimeter fencing. To the west, a new hedge sits 100m from South Lane directly opposite Lowfield roads, and the visual intrusion activities, dust generation and site runoff. of plant and machinery on site. At the early stages of the Without Secondary Mitigation having been construction stage, ground and This hedgerow is likely to have reached a height of 3.5m by Year 5, closing down applied throughout the scheme, the only change lower-level activities such as views into the Site. Additional hedgerow trees are likely to be some 7.5m high to the views/landscape following decommissioning creating further visual interest and adding to the screening. the construction of the would be the existing hedgerows which will have been allowed to grow out and will have been substation, solar panel areas and associated infrastructure Looking southwest, the existing hedge will have been allowed to grow out and will managed to a height of 5m. It is assumed that and inverters would be have been maintained at a height of 5m. Additional hedgerow trees, planted these will be retained. evident. During the latter part irregularly as appropriate, are likely to be some 7.5m high. of the construction stage, views With Mitigation, the negative effects of the physical decommissioning will be balanced out by would become available of the Shelterbelt planting further south between fields G3 and G4 will close down views elevated activities above the of the Site further to the southwest. the long-term landscape and visual effects of this hedgerows. mitigation. An existing weak and low hedge to the north of field G1 and G2 and to the west of Other works would be the property will help to enclose the Site and provide visual benefits across the undertaken in connection with wider landscape. the construction including fencing, gates, boundary Mature tree cover to the rear of this property to the east, whilst a new hedge to the western boundary of field C2 will have grown up to a height of 3.5m with irregular treatment and other means of trees sitting at some 7.5m against a backdrop of the woodland block beyond. enclosure and works for the provision of security and monitoring measures such as The assessment process has considered the visual amenity of this residential CCTV and the laying down of property and has taken into account views anticipated from both the ground and internal tracks. There would first floors. Where significant effects have been identified for Year 1 these have also be landscape and been found to be less than significant at Year 15 due to the proposed landscape biodiversity mitigation works, mitigation both from ground and first floors. At Year 15 in the consideration that a including planting and the separate Residential Visual Amenity Assessment (RVAA) may be required, the improvement of the findings for this receptor therefore show that the proposed landscape mitigation foreground hedgerows. will screen views from the ground floor principal rooms and aa such an RVAA is therefore not considered to be necessary. **Construction Access** This receptor sits on South Lane where access to the substation and Cottam 1 West Sites exists. This route would become busy during the construction phase. Another access to



	reducing the overall			
	impact.			
	Cable Route Corridor This receptor is within the 500m study area and there would be views of the cable route during construction.  Substation/s			
	This viewpoint is within the 2km study area and close to the substation and battery bank storage area at Cottam 1 and there would be views of this area.			
Magnitude	Very Low	Very Low	Low	Very Low
Level of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

Residential Receptor – R65 / Lowfield Farm			
In-Combination Effects [Cumulativ	e Sites] Cumulative Effects [Cumulative Developments]		
No Intervisibility	Fabric of the Landscape		
	There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
	There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the		
	character area		
	Aesthetic Aspects of the Landscape		
	Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative		
	developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening		
	woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and		
	Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the		
	following figures:		
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]		
	Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]		
	Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different		
	from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road		





of Effect

network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area. Overall Landscape Character and Visual Amenity Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects. Construction: Very Low Operation (Year 1): Very Low Not Applicable Operation (Year 1): with only Embedded Mitigation: Very Low Magnitude Operation (Year 15): Low Decommissioning: Very Low Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Type of Not Applicable Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term **Effect** Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term Construction: Negligible Not Significant Operation (Year 1): Negligible **Not Significant Significance** Not Applicable

Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant

Operation (Year 15): Minor **Not Significant** Decommissioning: Negligible **Not Significant** 



[Reference: EN010133/APP/C6.3.8.3.3.2.8\_A] November 2023

## Residential Receptor - R73 / East Farm

#### **Baseline Context:**

Farmstead occupying an irregular rectangular plot to the east side of the B1241 (Normanby Road), with the residential dwelling occupying the southern part of the plot, right at the eastern edge. There is a collection of large-scale agricultural buildings and long barns to the south of the property. The dwelling has an open aspect to the north directly overlooking a large grassland field, but with garden curtilage towards the west and south. There is a tall dense hedgerow to the immediate east boundary of the property.

**Type:** Singular building

Distance to Cottam Sites: 40m to Cottam 1

Closest settlement: 0m to Normanby by Stow

Nearest Viewpoint: VP19, VP20 and LCC-C-A

#### **Description of Receptor:**

The principal ground floor windows face north looking across a grassland field towards a minor tributary of the River Till. There are also secondary ground floor windows looking south over a lawned garden with a small pond and then with a large-scale agricultural building. The west gable of the property at ground floor faces towards a large orchard that extends towards the B1241 (Normanby Road) and the east facing gable looks directly into a tall boundary hedgerow.

The principal first floor windows face north looking over a grassland field towards a minor tributary of the River Till with the main River Till beyond and its associated waterside meadows. There are also secondary first floor windows looking south over a lawned garden with the small pond and then with a large-scale agricultural building beyond. The west gable of the property at first floor looks across the large orchard towards the B1241(Normanby Road) with large scale arable fields beyond. The east facing gable looks directly over the tall boundary hedgerow towards the River Till and the agricultural landscape beyond.

The views are influenced by the presence of the large meadow to the north, the orchard, and the large-scale agricultural buildings to the south. The tall hedgerow to the east is also a prominent feature. The surrounding arable land use is well managed with some interesting features, and the presence of the local concentration of the tree cover along the green lane and the tree cover adjoining the local tributary of the River Till is a strong feature in the landscape.

Overall, the views form the first-floor windows of the two-storey dwelling to the north, west and east are likely to capture the main visual interest over the surrounding landscape since the outlook to the south is influenced by the presence of the large-scale agricultural buildings. The ground floor windows of the main house capture immediate views over the gardens, the orchard, and agricultural buildings. The location offers some interesting features locally, but invigorating views out towards the surrounding landscape to the south and east are curtailed by the presence of woodlands and buildings around the plot. Within the wider landscape, there is a distinct presence of field hedgerows to provide a strong framework that form a significant component and add balance to the landscape. The mature ash trees within the hedgerows are also a strong feature. This location offers some intimacy although this is a busy road with passing traffic there is enclosure and intimacy provided the presence of the tributary and the orchard planting. The view is influenced by the presence of the busy road, but this is surpassed by the invigorating nature of the views east towards the limestone capped ridgeline encompassing Ingham and Ingham Cliff. The foreground presence of the green lane and its mature tree cover enhance the quality of the view, and the riparian woodland and tree cover that follows the course of the River Till is also a distinctive feature. The overall impression is that of an intact and invigorating landscape with far-reaching views.

Sensitivity: High

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



of Effect

#### Residential Receptor - R73 / East Farm **Operation Magnitude of** Mitigation Decommissioning **Construction Magnitude of Change** Change (Year 1) (Operation Magnitude of Change at Year 15) Magnitude of Change The east facing first floor outlook from the two-storey dwelling would not be significantly The principal first floor east The first detailed designs were produced in tandem with A similar process to that of affected, due to the presence of tree and hedgerow cover within the boundary of the garden construction stage, but with the facing windows of the twoconsultation with residential property owners where this area to provide screening of the works. The changes would include the construction storey dwelling would was requested by the owner. This consultation included Scheme being no longer operational. activities during site preparation / enabling works, construction, and commissioning with experience views over the area both site and desk-based work to determine any direct This is an assessment of the Site in effects such as construction traffic, noise and vibration from construction activities, dust of panels, and their presence impacts and suitable mitigation measures. Specific winter but assumes retention of mitigation measures applicable to R73 are set out below: generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on would be filtered by the existing vegetation and builds upon site. At the early stages of the construction stage, ground, and lower-level activities such as presence of the intervening the proposed primary and secondary the construction of the solar panel areas and associated infrastructure and inverters would hedgerows and tree cover. The requirement for mitigation relates to visibility to the mitigation that had been established just be evident from the first-floor outlook, but the ground floor would benefit from the east towards the Cottam 1 North Site. The mature as the future baseline. Effects are intervening hedgerow cover. During the latter part of the construction stage, views would The principal ground floor east hedgerow and tree cover to the immediate east boundary those arising from activities for the not be available of the elevated activities due to the presence of the tall hedgerow to the facing windows would of the property curtilage closes down some views. duration of the decommissioning to east. The works would be experienced over a wide proportion of the view, but the activities experience no views of the include site traffic, noise and would be set across an open field with intervening hedgerows and the course of the River To the north aspect of the main house, there would be no vibration from decommissioning panels due to the intervening Till to break up the effects. hedgerow cover. mitigation since there are no panels in this direction. activities, dust generation and site runoff. The first floor south facing Other works would be undertaken in connection with the construction including fencing, To the south aspect of the main house, there would an gates, boundary treatment and other means of enclosure and works for the provision of windows look over the largearea of proposed bird mitigation and the area would be security and monitoring measures such as CCTV and the laying down of internal tracks. scale agricultural buildings and kept free of panels. There would also be landscape and biodiversity mitigation works, including planting and the the tree cover to the green lane improvement of the foreground hedgerows. and there is unlikely to be views To the east there would be an area of proposed tussock of the panels. mix to the fields western border. To the centre of the field These short-lived construction activities would obstruct a wide proportion of the view is a spring sown cereal crop that will be bordered by framed by the first-floor windows from the two-storey property to the east but would not be The ground floor south facing existing uncultivated wet grassland which follows the a prominent feature since there is intervening tree cover to assist with the screening and windows would experience no meandering nature of the river Till. Panels would be only separation from the property. There would be a change to the arable land use, but the field views of the panels due to the present to the fields east of the River Till. boundaries and the associated tree cover would remain intact as strong features in the intervening agricultural landscape. There would not be a fundamental change to the surroundings to the north and buildings. To the north aspect of the main house, there would be no west of the property. mitigation since there are no panels in this direction. **Construction Access** All throughout the construction stage the residential receptor will be affected due to the All planting areas would be offset to a maximum of 50m local road just off Ingham Road providing access for construction vehicles into fields E3 and from the property boundary. **Cable Route Corridor** Residential receptor 73, East Farm, is within the 500m cable corridor study area and will be affected by the cable corridor route. The residential receptor is within the 2km study area for the Cottam 1 substation. There may be potential views of the substation site to the northeast due to limited intervening vegetation. Very Low Magnitude Low Low Very Low Type of Adverse & Short Term Adverse & Long Term Neutral & Long Term Neutral & Short Term **Effect Significance** Minor-Moderate **Not** Minor-Moderate **Not Significant** Minor Not Significant Minor Not Significant

**Significant** 





Residential Recepto	Residential Receptor - R73 / East Farm			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	<u>Sequential Frequent Visibility</u>	<u>Fabric of the Landscape</u>		
	Not Applicable.	There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
	Sequential Occasional Visibility  The east facing first floor outlook from the two-storey dwelling would be significantly affected by Cottam 1 in its own right by the construction and operation stages, due to the absence of	There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
	tree and hedgerow cover within the boundary of the garden area to provide screening of the works.  In Combination From the east facing elevation (first floor) outlook from the two-storey dwelling only one site	Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
	(Cottam 1 North) would be within the observers arc of vision at the same time without moving their head.  No cumulative effects.	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
	In succession Within a short time lapse, when moving to the south, north and west facing elevations (first floor) outlook of the two-storey dwelling only one site (Cottam 1 North) would be within the observers arc of vision at the same time without moving their head.	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
	No cumulative effects.	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects		
Magnitude	No Change	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low		
Type of Effect	No Change	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	No Change	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Negligible Not Significant		



[Reference: EN010133/APP/C6.3.8.3.3.3.13] January 2023

## Residential Receptor - R74 / West Farm

#### **Receptor Baseline:**

Farmstead occupying a rectangular plot to the west side of the B1241 (Normanby Road), with the residential dwelling occupying the northern part of the plot. There is a collection of outbuildings and long barns to the north of the residential dwelling. The dwelling has an open aspect to the south, directly overlooking a large garden with mature trees. There is an open park railing and gated railing entrance to the immediate east boundary of the property bordering the west side of the B1241 (Normanby Road) where open, but oblique visibility is gained across towards the east.

**Type:** Singular building

**Distance to Cottam Sites**: 54m to Cottam 1

Closest settlement: On Normanby by Stow

#### **Description of Receptor:**

The eastern gable of West Farm contains several ground floor and first floor windows looking east over the Site. Open views of the Site will be visible from these first-floor windows with some more limited visibility from the ground floor where the hedge to the south of Normanby Road breaks up views. Both ground and first floor windows to the principal elevation look over the garden area to the south with views to the north comprising traditional updated farm buildings. Views west are over the garden area, a traditional farm building and the arable landscape beyond.

Overall, the view is influenced by a mix of arable landscape elements with traditional and more large-scale modern agricultural buildings within the immediate visibility. Views towards the River Till show some riparian vegetation in the mid distance.

#### **Nearest Viewpoint: VP20**

The view is located on the B1242 (Normanby Road), looking east directly onto the western extent of the Cottam 1 North Site.

The view is influenced by the presence of the busy road, but this is surpassed by the invigorating nature of the views east towards the limestone capped ridgeline encompassing Ingham and Ingham Cliff. The foreground presence of the green lane and its mature tree cover enhance the quality of the view, and the riparian woodland and tree cover that follows the course of the River Till is also a distinctive feature. The overall impression is that of an intact and invigorating landscape with far-reaching views.

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





# Residential Receptor - R74 / West Farm

esidential Receptor – R74 / West Farm				
Construction	Operation (Year 1)	Operation (Year 15)	Decommissioning	
The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground and lower-level activities such as the construction of the substation, solar panel areas and associated infrastructure and inverters would be evident. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerows.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  Construction Access  There would be no view of the construction access to Cottam 1 from this viewpoint.  Cable Route Corridor Residential receptor is within the 500m cable route corridor study area	Lighting Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.	The first detailed designs were produced in tandem with consultation with residential property owners where this was requested by the owner. This consultation included both site and desk-based work to determine any direct impacts and suitable mitigation measures. Specific mitigation measures applicable to R74 are set out below:  The requirement for mitigation relates to visibility to the east towards Cottam 1 North Site (western extents). The open estate fencing to the boundary provides open views to the east.  To the north aspect of the main house, there would be no mitigation since there are no panels in this direction.  To the south aspect of the main house, there would an area of proposed bird mitigation and the area would be kept free of panels.  To the east aspect of the main house, there would be a hedge on the eastern boundary of Normanby Road. This hedgerow will be allowed to grow out to 5m. Beyond this planting the field would be an area of proposed bird mitigation and would be kept free of panels. Beyond this, the existing vegetation adjacent to the River Till will have matured and filled out and panels would sit beyond the River Till and a buffer of low riparian herb vegetation.  To the west aspect of the main house, there would be no mitigation since there are no panels in this direction.  All panelled areas would be offset to a maximum of 50m from the property boundary.  The assessment process has considered the visual amenity of this residential property and has taken into account views anticipated from both the ground and first floors. Where significant effects have been identified for Year 1 these have been found to be less than significant effects have been identified for Year 1 these have been found to be less than significant effects have been identified for Year 1 these have been found to be less than significant of Year 15 due to the proposed landscape mitigation both from ground and first floors. At Year 15 in the consideration that a separate Residential Visual Amenity Assessment (RVAA)	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.  Without Secondary Mitigation having been applied throughout the scheme, the only change to the views/landscape following decommissioning would be the existing hedgerows which will have been allowed to grow out and will have been managed to a height of 5m. It is assumed that these will be retained.  With Mitigation, the negative effects of the physical decommissioning will be balanced out by the long-term landscape and visual effects of this mitigation.	





	Substation/s: Residential receptor is within 2km study area of Cottam 1 North substation.			
Magnitude	Very Low	Very Low	Low	Very Low
Level of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate Not Significant	Negligible <b>Not Significant</b>

Residential R	sidential Receptor – R74 / West Farm				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]			
	No Intervisibility	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area  Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.  There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1			
		Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]  The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area			
		different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.			
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.			
Magnitude	Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low			





		Operation (Year 15): Low Decommissioning: Very Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Negligible Not Significant



[Reference: EN010133/APP/C6.3.8.3.3.3.14] January 2023

## Residential Receptor - R76 / Stow Pasture

#### **Receptor Baseline:**

Collection of residential dwellings and farmsteads fronting Ingham Road with a north south aspect. The properties comprise nos. 19 to 25 (Flat Topped Houses), No 27 Ingham Road which is a detached dwelling with stables and riding arena, No. 29 Ingham Road, which is a detached cottage, No. 31 Ingham Road which is a cream rendered detached dwelling with outbuildings and 'The Pastures'. The open aspect of some properties (19 to 25 and The Pastures) may yield some oblique visibility towards the south from ground floor windows towards the Cottam South Site. There may also be views north from first floor windows to the rear of the properties over the Cottam 1 North Site.

Type: Group of buildings

Distance to Cottam Sites: 44m to Cottam 1

Closest settlement: Stow at about 1.3km west

#### **Description of Receptor:**

No. 33 Ingham Road has a principal elevation looking south and has a low hedge to the road boundary. Views out to the south are from ground and first floor windows. A dense hedge lines the southern boundary of the Ingham Road with an arable field beyond and a dense field boundary to its southern extent. The main garden to this property is to the west and north with paddocks to the east.

No. 31 Ingham Road has a principal elevation looking south. The property sits back beyond a panelled fence with mature vegetation along this boundary but open views from the main elevation looking south. There are buildings to the north of the property with trees to the east and a small, well treed paddock beyond to further east. To the south, a dense hedge lines the southern boundary of the Ingham Road with mature hedgerows around the field opposite.

No. 29 Ingham Road sits opposite Fleets Lane. The principal elevation is to the south and the main garden area to the north. There are mature trees and hedges on the southern boundary and views out are limited. There are hedges along the southern extents of Ingham Road and lining Fleets Lane opposite. The landscape beyond is of agricultural fields and mature hedgerows.

No. 27 Ingham Road has a mature boundary hedge to the south, closing down views from ground floor elevations. First floor dormer windows on the principal elevation look south over the Ingham Road. There are buildings and equestrian facilities to the east of this dwelling and further buildings to the west. The main garden and paddocks lie to the north.

Nos. 19-25 are flat roofed properties with low formal hedges to their principal southern elevations. Gardens lie to the north, south, east, and west, of this block of houses. Both ground floor and first floor principal windows look out over the Ingham Road to the landscape beyond.

#### **Nearest Viewpoint: VP13**

The view is located along Fleets Lane at the small settlement of Stow Pasture, looking towards the southern extent of the Cottam 1 Site/Sites.

The view is pleasant and typical to local character with single track lanes, tall hedgerows, and strong vertical elements such as telegraph poles. The strong hedgerows surrounding Fleets Lane have some gaps that provide for occasional views across the area. The overall experience of this view is interesting with an overriding sense of safety and security.

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



# Residential Receptor - R76 / Stow Pasture

#### Construction **Operation (Year 1)** Operation (Year 15) Decommissioning The changes would include the A similar process to that of construction stage, but **Lighting** The first detailed designs were produced in tandem with consultation with construction activities during Lighting will be limited to downlights within residential property owners where this was requested by the owner. This with the Scheme being no longer operational. This site preparation / enabling substations and battery banks only and used when consultation included both site and desk-based work to determine any direct is an assessment of the Site in winter but assumes works, construction, and maintenance or security is required. Lighting will be impacts and suitable mitigation measures. Specific mitigation measures applicable retention of existing vegetation and builds upon PIR operated and will be calibrated to vehicle and to R76 are set out below: the proposed primary and secondary mitigation commissioning with effects such as construction traffic, personnel movements. All visible lighting would be that had been established as the future baseline. noise and vibration from 50W, installed at a maximum height of 4m with cowls The requirement for mitigation relates to visibility to the south towards Cottam 1 Effects are those arising from activities for the South Site and north to Cottam 1 North Site. fitted to prevent light spillage. Lighting required within duration of the decommissioning to include site construction activities, dust generation, site runoff, mud on panelled areas will be manually operated. There will be traffic, noise and vibration from decommissioning no lighting on perimeter fencing. Enhanced hedges to the north and south of 33 Ingham Road will have grown out roads, and the visual intrusion activities, dust generation and site runoff. of plant and machinery on site. and will have been managed to a height of 5m with hedgerow trees reaching some 7.5m. Beyond the hedge to the north, a field of bird mitigation will contain no Without Secondary Mitigation having been At the early stages of the construction stage, ground and applied throughout the scheme, the only change panels. lower-level activities such as to the views/landscape following decommissioning the construction of the A new hedge to the south of No. 29 and 31 Ingham Road is likely to have reached a would be the existing hedgerows which will have height of 3.5m with hedgerow trees reaching some 7.5m. Development is set back been allowed to grow out and will have been substation, solar panel areas and associated infrastructure from the Ingham Road. managed to a height of 5m. It is assumed that and inverters would be these will be retained. evident. During the latter part There will be a block of shelterbelt planting along Fleets Lane which is likely to have reached a height of 7.5m precluding views of the Site from the west/northwest With Mitigation, the negative effects of the of the construction stage, views would become available of the along Ingham Road. There will be a further new hedge running broadly physical decommissioning will be balanced out by elevated activities above the north/south across the Site which will break up views from the northeast with the the long-term landscape and visual effects of this hedgerows. hedgerow having grown to some 3.5m high and hedgerow trees reaching some mitigation. 7.5m at Year 15. Other works would be undertaken in connection with A shelterbelt to the northwest of No. 27 along the existing track is likely to have the construction including reached a height of 7.5m, whilst scattered tree planting adjacent to the River Till to fencing, gates, boundary the north will have reached a height of some 7.5m. treatment and other means of enclosure and works for the There is no mitigation to the east or west of these properties as no panels exist. provision of security and monitoring measures such as The assessment process has considered the visual amenity of this residential CCTV and the laying down of property and has taken into account views anticipated from both the ground and internal tracks. There would first floors. Where significant effects have been identified for Year 1 these have also be landscape and been found to be less than significant at Year 15 due to the proposed landscape biodiversity mitigation works, mitigation both from ground and first floors. At Year 15 in the consideration that a including planting and the separate Residential Visual Amenity Assessment (RVAA) may be required, the improvement of the findings for this receptor therefore show that the proposed landscape mitigation foreground hedgerows. will screen views from the ground floor principal rooms and aa such an RVAA is therefore not considered to be necessary. **Construction Access** All throughout the construction stage the residential receptor will be affected due to Ingham Road having a point of access into the Cottam 1 North Site. The access route is through a local track near Low Farm as it connects to fields C26 and C25. Cable Route Corridor



	Residential receptor is outside of the 500m cable route corridor study area  Substation/s Residential receptor is within the 2km study area for Cottam 1 North substation.			
Magnitude	Very Low	Very Low	Low	Very Low
Level of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

In Combination Effects [Compulative Cites]	Cumulativa Effecta [Cumulativa Davalanmanta]
In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	There would be the introduction of new elements and features comprising the solar panel areas and the substation ar within the character area
	Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements at built form would also curtail cumulative visibility.
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set our further detail within the following figures:
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or a different from another. The strategic major road network is defined by important historic routes and in contrast, the west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
	Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and





		infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects
	Not Applicable	Construction: Very Low Operation (Year 1): Very Low
Magnitude	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Very Low
		Operation (Year 15): Low
		Decommissioning: Very Low
	Not Applicable	Construction: Adverse & Short Term
Type of		Operation (Year 1): Adverse & Long Term
		Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Effect		Operation (Year 15): Beneficial & Long Term
		Decommissioning: Neutral & Short Term
		Construction: Negligible Not Significant
Significance of Effect	Net Applicable	Operation (Year 1): Negligible Not Significant
	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant
		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Negligible Not Significant





#### Residential Receptor - R84 / Clandon House

#### **Receptor Baseline:**

Collection of residential dwellings comprising Clandon House, Clandon Barn, Westop Cottages, Thorpe House, Cottage, and East Cottage. Westop Cottages, Clandon House and Clandon Barn have a north south orientation, with their rear elevations facing towards the Cottam 1 South Site. Thorpe House, Thorpe le Fallows Farm, Cottage, and East Cottage all face north towards Thopre Lane and look over Westop Cottages, Clandon House and Clandon Barn.

**Type:** Group of buildings

**Distance to Cottam Sites**: 153m to Cottam 1

**Closest settlement:** On Thorpe in the Fallows

#### **Description of Receptor:**

The principal elevation to Westrop Cottages lies to the south overlooking Thorpe Road. Gardens and meadow lie to the north with the War Memorial sitting directly north of these properties and beyond existing boundary vegetation.

The principal elevation to Clandon House lies to the south overlooking Thorpe Road and southwest over Thorpe Le Fallows Farm with the main garden area to the north and barns to the east.

The principal elevation to Clandon Barn, a single storey dwelling, lies to the south overlooking farmland beyond the Thorpe Road with a small, enclosed garden area and mature evergreen hedging to the north precluding views north.

#### **Nearest Viewpoint:** VP5

The view is located on the PRoW, bridleway TLFe/31/2, looking north with the southern extent of the Cottam 1 South Site in the foreground.

The view is influenced by the open arable fields and the woodlands on the horizon that form a significant component and add balance to the landscape. The location offers some intimacy despite the close proximity to the residential property (The Lodge) to the south. There is a gap between the woodland on the horizon that extends the view towards the distant ridge line where the Scampton Airfeld is just visible. The overall experience is interesting and very pleasant, with some depth to views and strong contrasting features.

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



# Residential Receptor - R84 / Clandon House

#### **Operation (Year 1)** Construction **Operation (Year 15)** Decommissioning The changes would include the Lighting The first detailed designs were produced in tandem with consultation with A similar process to that of construction stage, but construction activities during Lighting will be limited to downlights within residential property owners where this was requested by the owner. This with the Scheme being no longer operational. This site preparation / enabling substations and battery banks only and used when consultation included both site and desk-based work to determine any direct is an assessment of the Site in winter but assumes works, construction, and maintenance or security is required. Lighting will be impacts and suitable mitigation measures. Specific mitigation measures applicable retention of existing vegetation and builds upon PIR operated and will be calibrated to vehicle and commissioning with effects to R84 are set out below: the proposed primary and secondary mitigation such as construction traffic, personnel movements. All visible lighting would be that had been established as the future baseline. noise and vibration from 50W, installed at a maximum height of 4m with cowls The requirement for mitigation relates to visibility to the north and will be towards Effects are those arising from activities for the construction activities, dust fitted to prevent light spillage. Lighting required within Cottam 1 South Site. No principal elevations of properties to the north of Thorpe duration of the decommissioning to include site generation, site runoff, mud on panelled areas will be manually operated. There will be Lane face this direction. traffic, noise and vibration from decommissioning roads, and the visual intrusion no lighting on perimeter fencing. activities, dust generation and site runoff. of plant and machinery on site. A new hedgerow to the north of the War Memorial Site will have established and is likely to have reached a height of 3.5m with hedgerow trees reaching some 7.5m. Without Secondary Mitigation having been At the early stages of the This will break up views in Year 1 and will close down views north by Year 15. applied throughout the scheme, the only change construction stage, ground and lower-level activities such as to the views/landscape following decommissioning To the west of the meadow adjacent to Westrop Cottages, there will be a shelterbelt the construction of the would be the existing hedgerows which will have substation, solar panel areas screening views of the development. This shelterbelt is likely to have reached a been allowed to grow out and will have been managed to a height of 5m. It is assumed that and associated infrastructure height of 7.5m. these will be retained. and inverters would be evident. During the latter part Vegetation is set back a minimum of 50m from the boundary of these dwellings. With Mitigation, the negative effects of the of the construction stage, views would become available of the Between Clandon House and Clandon Barn (to the north) there will be a block of physical decommissioning will be balanced out by elevated activities above the scattered trees which will have reached a height of some 7.5m closing down views the long-term landscape and visual effects of this hedgerows. northeast from Clandon Barn by Year 15. A further belt to the east will close down mitigation. views looking east whilst a shelterbelt along the Thorpe Road further east will Other works would be screen views from the west having reached a height of some 7.5m. To the north of undertaken in connection with Clandon Barn, the enhanced hedgerow will have been allowed to grow out and is the construction including likely to have reached a height and be managed at 5m. Hedgerow trees will have fencing, gates, boundary reached a height of some 7.5m by Year 15. treatment and other means of enclosure and works for the There is no mitigation to the south as this lies outside of the Site. provision of security and The assessment process has considered the visual amenity of this residential monitoring measures such as CCTV and the laying down of property and has taken into account views anticipated from both the ground and first floors. Where significant effects have been identified for Year 1 these have internal tracks. There would been found to be less than significant at Year 15 due to the proposed landscape also be landscape and biodiversity mitigation works, mitigation both from ground and first floors. At Year 15 in the consideration that a including planting and the separate Residential Visual Amenity Assessment (RVAA) may be required, the findings for this receptor therefore show that the proposed landscape mitigation improvement of the will screen views from the ground floor principal rooms and aa such an RVAA is foreground hedgerows. therefore not considered to be necessary. Construction Access All throughout the construction stage the residential receptor will be affected due to Thorpe Lane having a point of access into the Cottam 1 South Site through field D10. Cable Route Corridor



[Reference: EN010133/APP/C6.3.8.3.3.3.15_A] January 2023

	Residential receptor is outside of the 500m cable route corridor study area. <b>Substation/s</b> Residential receptor is outside of the 2km study area of Cottam 1 North substation.			
Magnitude	Very Low	Very Low	Low	Very Low
Level of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	There would be the introduction of new elements and features comprising the solar panel areas and the substation ar within the character area
	Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements a built form would also curtail cumulative visibility.
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set ou further detail within the following figures:
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or an different from another. The strategic major road network is defined by important historic routes and in contrast, the west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
	Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are feature value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulativ





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		infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects
		Construction: Very Low
Magnitude	Not Applicable	Operation (Year 1): Very Low
Magintude		Operation (Year 15): Low
		Decommissioning: Very Low
		Construction: Adverse & Short Term
Type of	Not Applicable	Operation (Year 1): Adverse & Long Term
Effect		Operation (Year 15): Beneficial & Long Term
		Decommissioning: Neutral & Short Term
		Construction: Negligible Not Significant
Significance	Not Applicable	Operation (Year 1): Negligible Not Significant
of Effect		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Negligible Not Significant



# Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.4.1: Transport Receptors – Transport Overview [Reference: EN010133/APP/C6.3.8.3.4.1.1] January 2023

Reference	Name	Site	Distance to Site (m)	Potential Cumulative Yes/No	Potential Cumulative (List which Sites)	Relevant Viewpoint/s (nearest)	Receptor Baseline	Primary Mitigation (Embedded)	Secondary Mitigation	Significant Effects	Notes
T004	Lane to Mount Pleasant Farm off C229, Scotton	Cottam 3a	483	N	n/a	VP65 and VP66	Local track access to Mount Pleasant Farm leading from the C229 (Laughton Road), Scotton. The track follows an almost north south alignment running parallel with the east boundary of Dallison Plantation, then taking a 'dog-leg' turn towards Mount Pleasant Farm at the junction with Northorpe Beck. Open aspect towards the east at north section of track, looking towards Northorpe and Scotton. The southern section of the track has 'all-round' visibility at close range.	Not applicable	Not applicable	No	Unlikely visibility towards Cottam 3a Site/Sites due to the flat, low-lying landform. Intervening woodland blocks and hedgerows also curtial visibility.
Т006	Park Lane, Laughton near Gainsborough	Cottam 3a	812	N	n/a	VP64	Local track access to Park House Farm leading from the A159 (Laughton Road), near Gainsborough. The track follows a north south alignment, then taking a 'right-angled' bend at the junction with the tributary drain of Northorpe Beck. The track then heads east towards Mount Pleasant Farm. Open aspect along the full route with 'all-round' visibility at close range.	Not applicable	Not applicable	No	Unlikely visibility towards Cottam 3a Site/Sites due to the flat, low-lying landform, intervening woodland blocks and hedgerows. Woodland cover at the Respect Green Burial Park also curtials visibility along with the intervening farmsteads at Bluebell Farm and Blyton Grange, which close down visibility towards the Site/Sites.
Т010	Unnamed Road, Laughton near Gainsborough	Cottam 3a	144	N	n/a	VP66	Local track access passing between Grange Farm and Mount Pleasant Farm, near Gainsborough. The track follows a 'dogleg' alignment to the south of Northorpe Beck, running in an almost east west direction. The track then continues (as an unnamed road) towards Park House Farm at Laughton, near Gainsborough. Open aspect along the full route with 'allround' visibility at close range.	Panels set back from boundary of Cottam 3a Site/Sites.	New planting bordering the north and northeast boundaries of the Cottom 3a Site/Sites.	No	Some visibility towards Cottam 3a Site/Sites due to the flat, low- lying landform and lack of intervening woodland blocks and hedgerows. New planting along the north and north east boundaries of the Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.
ТО11	Unnamed Road, Laughton near Gainsborough	Cottam 3a	649	N	n/a	LCC-C-V	Local track access passing between Mount Pleasant Farm and Dring Lane, near Gainsborough. The track passes in an east west direction and then takes a 'right-angled' turn south towards Dring Lane. Open aspect along the full route with 'allround' visibility at close range due to absence of both roadside and field hedgerows.	Not applicable	Not applicable	No	Unlikely visibility towards Cottam 3a Site/Sites due to the flat, low-lying landform and the intervening woodland at the Respect Green Burial Park. The intervening farmsteads at Bluebell Farm and Blyton Grange are also likely to close down visibility towards the Site/Sites.
Т012	Dring Lane, Laughton near Gainsborough	Cottam 3a	447	N	n/a	LCC-C-V	Minor, local lane passing between the A159 (Laughton Road) near Gainsborough and the Green Respect Burial Park. The track passes in an east west direction across a large-scale, arable landscape. Open aspect along the full route with 'allround' visibility at close range due to absence of both roadside and field hedgerows.	Panels set back from boundary of Cottam 3a Site/Sites.	New planting bordering the north and northwest boundaries of the Cottam 3a Site/Sites.	No	Some visibility towards Cottam 3a Site/Sites due to the flat, low- lying landform and lack of intervening woodland blocks and hedgerows. New planting along the north and north west boundaries of the Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.
T013	Gainsborough Road, Laughton near Gainsborough (A159)	Cottam 3a	69	N	n/a	VP63, VP64 and LCC-C-V	The A159 (Gainsborough Road) near Laughton Gainsborough that heads from Scotter in the north, passing to the east of Laughton then with a slight bend in the road, it passes towards Blyton in the south.	Panels set back from boundary of Cottam 3a Site/Sites.	New planting bordering the north and northwest boundaries of the Cottam 3a Site/Sites.	No	Very limited visibility towards Cottam 3a Site/Sites due to the presence of hedgerows and tree belts to the east side of the A159. The intervening farmsteads at Bluebell Farm and Blyton Grange are also likely to close down visibility. New planting along the north and north west boundaries of the Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.

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T014	Blyton Road, Laughton near Gainsborough	Cottam 3a	30	Y	3b	VP63	Blyton Road, passing between Laughton Road, Blyton and Laughton in an almost north south alignment. The road is partially enclosed along its length due to the bordering woodland blocks, vergeside hedgerows and riparian vegetation along Laughton Highland Drain. There is also undulating topography which provides additional enclosure to the road.	Panels set back from boundary of Cottam 3a Site/Sites.	New planting bordering the west boundaries of the Cottam 3a Site/Sites.	No	Very minor visibility towards the Cottam 3a Site/Sites except right at the junction with the A159 (Laughton Road) where there are direct views across the junction towards the Site/Sites. The intervening farmsteads at Bluebell Farm and Blyton Grange are also likely to close down visibility in this direction. New planting along the west boundaries of the Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.
T015	Lane to Grange Farm off B1205, Northorpe near Scotter	Cottam 3a	398	N	n/a	VP61 and VP66	Local track access passing between Blenheim Farm and Grange Farm, Northorpe near Scotter. The track passes in a north south direction and takes a slight 'dog-leg' turn at the crossing with a minor tributary of Northorpe Beck. Open aspect along the southern part of the route with 'all-round' visibility at close range due to absence of both roadside and field hedgerows. Northern section of the track is more enclosed at close range, due to topography and vegetation cover. The intervening agricultural buildings at Blenheim Farm also provide intervening screening.	Not applicable	Not applicable	No	Unlikely visibility towards Cottam 3a Site/Sites due to the flat, low-lying landform, the intervening hedgerows and riparian vegetation cover along a local tributary of Northorpe Beck. The intervening agricultural buildings are also likely to close down visibility towards the Site/Sites at the southern section of the track.
Т016	B1205 Kirton Road to C228 Monson Road, Northorpe near Scotter	Cottam 3a	5	Y	3b	VP59, VP60 and VP61	Kirton Road, passing between Monson Road, Northorpe and the settlement of Blyton in an almost northeast southwest alignment. The road then takes a wide 'dog-leg' turn between Blenheim Farm and Blyton Level Crossing at the eastern edge of the Site/Sites. The road is partially open along its length due to the absence of bordering woodland blocks and vergeside hedgerows.	Panels set back from boundary of Cottam 3a Site/Sites.	New planting bordering the west and south boundaries of the Cottam 3a Site/Sites.	Yes	Open visibility towards Cottam 3a Site/Sites due to the flat, low- lying landform and the absence of intervening hedgerows and woodland cover. New planting along the north and east boundaries of the Site/Sites will curtial visibility in Year 1 and help close down some visibility in Year 15.
Т016	B1205 Kirton Road to C228 Monson Road, Northorpe near Scotter	Cottam 3b	370	Y	3a	VP59, VP60 and VP61	Kirton Road, passing between Monson Road, Northorpe and the settlement of Blyton in an almost northeast southwest alignment. The road then takes a wide 'dog-leg' turn between Blenheim Farm and Blyton Level Crossing at the eastern edge of the Site/Sites. The road is partially open along its length due to the absence of bordering woodland blocks and vergeside hedgerows.	Not applicable	Not applicable	No	Unlikely visibility towards Cottam 3b Site/Sites due to the flat, low-lying landform and the intervening hedgerows and riparian vegetation cover along a local tributary of Laughton Highland Drain. The intervening vegetation along the mainline railway is also likely to close down visibility towards the Site/Sites.
T016	B1205 Kirton Road to C228 Monson Road, Northorpe near Scotter	High voltage cable corridor and access	847.966028								
Т018	Laughton Road, Blyton (A159)	Cottam 3a	13	Y	3b	VP63	Blyton Road, passing between the junction with Station Road in an almost north south alignment. The road is mostly open along its length due to the absence bordering woodland blocks. Vergeside hedgerows are well-managed and there is also undulating topography which provides additional elevation to the road at this section.	Panels set back from west boundary of Cottam 3a Site/Sites where they share a boundary with the A159 (Laughton Road).	New planting bordering the north and northwest boundaries of the Cottam 3a Site/Sites.	No	Very minor visibility towards the Cottam 3a Site/Sites but mostly right at the junction with the A159 (Blyton Road) where there are direct views across the junction towards the Site/Sites. The intervening farmsteads at Bluebell Farm and Blyton Grange are also likely to close down visibility at this location. New planting along the west boundaries of the Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.
T018	Laughton Road, Blyton (A159)	High voltage cable corridor and access	994.366036								

Т019	Kirton Road, Blyton	Cottam 3a	0	Y	3b	VP59, VP60 and VP62	Kirton Road, passing between the settlement of Blyton and Northorpe in an almost east west alignment. The road then takes a wide 'dog-leg' turn between Blenheim Farm and Blyton Level Crossing at the eastern edge of the Site/Sites. The road is partially open along its length due to the absence of bordering woodland blocks and vergeside hedgerows.	Panels set back from southern boundary of Cottam 3a Site/Sites.	New planting bordering the east and south boundaries of the Cottam 3a Site/Sites.	Yes	Open visibility towards Cottam 3a Site/Sites due to the low height of intervening hedgerows and distinct lack of woodland and tree cover. New planting along the south and east boundaries of the Site/Sites will curtial visibility in Year 1 and help close down some visibility in Year 15.
Т019	Kirton Road, Blyton	Cottam 3b	348	Υ	3a	VP59, VP60 and VP62	Kirton Road, passing between the settlement of Blyton and Northorpe in an almost east west alignment. The road then takes a wide 'dog-leg' turn between Blenheim Farm and Blyton Level Crossing at the eastern edge of the Cottam 3a Site/Sites. The road is partially open along its length due to the absence of bordering woodland blocks and vergeside hedgerows.	Not applicable	Not applicable	No	Unlikely visibility towards Cottam 3b Site/Sites due to the flat, low-lying landform and the intervening hedgerows and tree cover that divides the pattern of small fields to the south of Kirton Road. The intervening vegetation along the mainline railway is also likely to close down visibility towards the Site/Sites.
T019	Kirton Road, Blyton	High voltage cable corridor and access	0								
T021	Bonsdale Lane, Blyton	Cottam 3a	113	Y	3b	VP5, VP58, VP59 and VP61	Bonsdale Lane is located to the east of Blyton and this section of the lane extends from Bonsdale Farm at the junction with Green Lane to meet with Kirton Road to the north of the mainline railway. The lane takes a north south alignment and is partially open along its western edge where its forms a boundary with Cottam 3b Site/Sites.	Not applicable	Not applicable	No	Unlikely visibility towards Cottam 3a Site/Sites due to intervening vegetation along the mainline railway. The flat, low-lying landform and the intervening hedgerows and tree cover that divides the pattern of small fields to the south side of Kirton Road is also likely to close down visibility towards the Site/Sites.
T021	Bonsdale Lane, Blyton	Cottam 3b	2	Υ	За	VP57, VP58, VP59 and VP61	Bonsdale Lane is located to the east of Blyton where this section of the lane extends from Bonsdale Farm at the junction with Green Lane to meet with Kirton Road to the north of the mainline railway. The lane takes a north south alignment and is partially open along its western edge where its forms a boundary with Cottam 3b Site/Sites.	Panels set back from eastern boundary of Cottam 3b Site/Sites.	New planting bordering the south and east boundaries of the Cottam 3b Site/Sites.	Yes	Open visibility towards Cottam 3b Site/Sites due to the low height of intervening hedgerows and distinct lack of woodland and tree cover. New planting along the south and east boundaries of the Site/Sites will curtial visibility in Year 1 and help close down some visibility in Year 15.
T021	Bonsdale Lane, Blyton	High voltage cable corridor and access	496.594239								
T021	Bonsdale Lane, Blyton	High voltage cable corridor and access	824.125511								
Т022	High Street, Blyton (A159)	Cottam 3a	361	Υ	3b	VP62	High Street passes through Blyton and extends from the junction with Carr Lane in the south of the settlement to meet at the 'T' unction with Station Road in the north. The street takes a meandering southwest to northeast alignment and is fully enclosed on both sides by built form.	Not applicable	Not applicable	No	No visibility towards Cottam 3a Site/Sites due to intervening built form along High Street.
T022	High Street, Blyton (A159)	High voltage cable corridor and access	995.638269								
T023	Station Road, Blyton	Cottam 3a	138	Υ	3b	LCC-C-S	Station Road passes to the south of Blyton and extends between Pilham Lane in the south to meet with the junction of Kirton Road in the north. The road takes an almost north south alignment with a slight adjustment where its crosses the mainline railway.	Not applicable	Not applicable	No	Unlikely visibility towards Cottam 3a Site/Sites due to intervening vegetation cover along the mainline railway. The flat, low-lying landform and the intervening hedgerows and tree cover that divides the pattern of small fields (to the south side of Kirton Road and east side of Station Road) is also likely to close down visibility towards the Site/Sites.

Т023	Station Road, Blyton	Cottam 3b	514	Y	3a	LCC-C-S	Station Road passes to the south of Blyton and extends between Pilham Lane in the south to meet with the junction of Kirton Road in the north. The road takes an almost north south alignment with a slight adjustment where its crosses the mainline railway.	Not applicable	Not applicable	No	Unlikely visibility towards Cottam 3b Site/Sites due to intervening vegetation cover along the mainline railway. The flat, low-lying landform and the intervening hedgerows and tree cover that divides the pattern of small fields (to the south side of Kirton Road and east side of Station Road) is also likely to close down visibility towards the Site/Sites.
T023	Station Road, Blyton	High voltage cable corridor and access	775.552266								
T025	Pilham Lane, Bonsdale	Cottam 3a	943	Υ	3b	VP57	Bonsdale Lane is located to the southeast of Blyton and extends from the junction with Kirton Road in the north where the lane then heads south past Bonsdale Farm. The road then continues over Aisby Beck takes a 'right-angled' turn to head west and then meets with Pilham Lane in the southwest. This section of the lane extends from the southeast corner of the Cottam 3b Site/Sites and heads as far as the 'right-angled' turn.	Not applicable	Not applicable	No	Unlikely visibility towards Cottam 3a Site/Sites due to the foreground hedgerows to the west side of Bonsdale Lane, the intervening field hedgerows to each side of Green Lane and the strong vegetation cover along the mainline railway. The flat, low-lying landform is also likely to close down visibility towards the Site/Sites.
T025	Pilham Lane, Bonsdale	Cottam 3b	4	Y	3a	VP57	Bonsdale Lane is located to the southeast of Blyton and extends from the junction with Kirton Road in the north where the lane then heads south past Bonsdale Farm. The road then continues over Aisby Beck takes a 'right-angled' turn to head west and then meets with Pilham Lane in the southwest. This section of the lane extends from the southeast corner of the Cottam 3b Site/Sites and heads as far as the 'right-angled' turn.	Panels set back from south and east boundary of Cottam 3b Site/Sites where they share a boundary (and are in close proximity to) this section of Bonsdale Lane.	bordering the east and south boundaries of the Cottam 3a	No	Some visibility towards the Cottam 3b Site/Sites but mostly to the south where there are oblique views from Bonsdale Lane. The hedgerow bordering the west side of Bonsdale Lane and the intervening field hedgerows to each side of Green Lane are also likely to close down visibility at this location. New planting along the east and south boundaries of the Cottam 3b Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.
T025	Pilham Lane, Bonsdale	High voltage cable	254.235397								
Т028	Green Lane, Pilham	corridor and access  Cottam 3b	140	N	n/a	VP57	Green Lane is located to the southeast of Blyton and extends from the junction with Bondsdale Lane (to the south of Bonsdale Farm) towards Pilham to meet with Pilham Lane at the junction with the Church of All Saints.	Panels set back from southern boundaries of Cottam 3b Site/Sites.	New planting bordering the south and boundaries of the Cottam 3b Site/Sites.	No	Some visibility towards the Cottam 3b Site/Sites. The hedgerow bordering the north side of Green Lane and the intervening field hedgerows to the north of the lane are likely to close down visibility. The very slight undulations in landform is also likely to curtail views. New planting along the south boundaries of the Cottam 3b Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.
T028	Green Lane, Pilham	High voltage cable corridor and access	0								
T028	Green Lane, Pilham	High voltage cable corridor and access	673.278141								
Т029	Pilham Lane, Blyton	Cottam 3b	537	N	n/a	LCC-C-R	Pilham Lane is located to the south of Blyton and to the west of the small settlement of Pilham. The lane extends from Pilham at the junction with Pilham Lane and then heads west towards Wharton where it forms a junction with the A159 to the north of Manor Farm.		Not applicable	No	No visibility towards Cottam 3b Site/Sites due to the foreground woodland blocks that almost fully enclose the western edge of the settlement of Pilham.

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Т032	Road to Dunstall, Aisby near Gainsborough	Cottam 2	517	Y	3b	VP54	The road is located to the southeast of Blyton and to the south of Bonsdale Farm, and extends from Bonsdale Lane in the west as far as the Deserted Village of Dunstall (List Entry: 14996) in the east.	Not applicable	Not applicable	No	Limited visibility towards Cottam 2 Site/Sites due to the foreground riparian vegetation along Corringham Beck and the intervening field hedgerows with some hedgerow trees. The flat-low-lying landform is also likely to curtail views.
Т032	Road to Dunstall, Aisby near Gainsborough	Cottam 3b	748	Y	2	VP54	The road is located to the southeast of Blyton and to the south of Bonsdale Farm, and extends from Bonsdale Lane in the west as far as the Deserted Village of Dunstall (List Entry: 14996) in the east.	Not applicable	Not applicable	No	No visibility towards Cottam 3b Site/Sites due to the foreground woodland blocks, the intervening field hedgerows and the built form at Bonsdale Farm. The flat-low-lying landform is also likely to curtail views.
T032	Road to Dunstall, Aisby near Gainsborough	High voltage cable corridor and access	288.635917								
Т034	Pilham Lane, Aisby near Gainsborough	Cottam 2	203	Y	3b	VP54	Pilham Lane is located to the north of Corringham and to the southwest of the small settlement of Aisby. The lane extends from the 'right-angled' turn (on Piham Lane) the east and then extends towards the west as far as Pilham Lane.	Panels set back from northwest boundaries of Cottam 2 Site/Sites.	New planting bordering the northwest boundaries (which share a boundary with Corringham Beck) of the Cottam 2 Site/Sites.	No	Some visibility towards the Cottam 2 Site/Sites. The hedgerow bordering the south side of Pilham Lane and the intervening field hedgerows to the south of the lane are likely to close down visibility. The riparian vegetation bordering Corringham Beck and the flat, low-lying landform is also likely to curtail views. New planting along the northwest boundaries of the Cottam 2 Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.
Т034	Pilham Lane, Aisby near Gainsborough	Cottam 3b	372	Y	2	VP54	Pilham Lane is located to the north of Corringham and to the southwest of the small settlement of Aisby. The lane extends from the 'right-angled' turn (on Piham Lane) the east and then extends towards the west as far as Pilham Lane.	Not applicable	Not applicable	No	No visibility towards Cottam 3b Site/Sites due to the foreground woodland blocks and the built form of Aisby. The intervening field hedgerows, the riparian vegetation bordering Aisby Beck and the flat-low-lying landform is also likely to curtail views.
T034	Pilham Lane, Aisby near Gainsborough	High voltage cable corridor and access	0								
T035	Access to Northfield Farm, Pilham	High voltage cable corridor and access	963.690482								
Т036	Pilham Lane, Pilham	Cottam 3b  High voltage cable	537	N	n/a	VP52	Pilham Lane extends from Pilham in the north as far south as Corringham to join with the A631 (Corringham Road) just to the southwest of Corringham.	Not applicable	Not applicable	No	No visibility towards Cottam 3b Site/Sites due to the foreground hedgerows, intervening woodland blocks and the built form of Pilham, Aisby and the Gilby Medieval Settlement (List Entry: 11695). The intervening field hedgerows to the east of the lane, the riparian vegetation bordering Aisby Beck and the flat-low-lying landform is also likely to curtail views.
T036	Pilham Lane, Pilham	corridor and access	963.278206								

Т037	Yawthorpe Lane, Willoughton	Cottam 2	423	N	n/a	VP5	Yawthorpe Lane is located to the north of the A631 (Corringham Road) between the settlements of Corringham in the west and Hemswell in the east. The lane extends from Gainsborough Road, Willhoughton in the south as far north as the Deserted Village of Dunstall (where there is no further access at this point).	Panels set back from northeast boundaries of Cottam 2 Site/Sites.	New planting bordering the northeast boundaries (which share a boundary with Yawthorpe Beck) of the Cottam 2 Site/Sites.	No	Some visibility towards the Cottam 2 Site/Sites. There are no hedgerows bordering the west side of Yawthorpe Lane, but the intervening field hedgerows to the west of the lane are likely to close down some visibility. The riparian vegetation bordering the Yawthorpe Beck and the very gently undulating landform is also likely to curtail views. New planting along the northeast boundaries of the Cottam 2 Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.
Т038	Field Farm Lane, Corringham	Cottam 2	256	N	n/a	LCC-C-P	Field Farm Lane is located to the north of Corringham, west of Yawthorpe and to the south of the small settlement of Aisby. The lane extends from Corrringham in the south at the junction with East Lane and meets with Pilham Lane in the north at the small settlement of Aisby.	Panels set back from west boundaries of Cottam 2 Site/Sites.	New planting bordering the west boundaries (which share a boundary with Corringham Beck) of the Cottam 2 Site/Sites.	No	Some visibility towards the Cottam 2 Site/Sites. There are hedgerows bordering the east side of Field Farm Lane, and the intervening field hedgerows to the east of the lane are also likely to close down some visibility. The riparian vegetation bordering the Corringham Beck and the flat, low-lying landform is also likely to curtail views. New planting along the west boundaries of the Cottam 2 Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.
T038	Field Farm Lane, Corringham	High voltage cable corridor and access	0								
T040	Access to Corringham Grange, Corringham	Cottam 2	0	N	n/a	VP49	Local access track that serves the residential properties known as Corringham Grange Farm and The Cottage. The track extends from East Lane in the south (at the point where it makes a 'right'angled' turn towards the A631, Corringham Road) and extends as far north as The Cottage, where there is no further access.	Panels set back from all boundaries of the Cottam 2b Site/Sites.	New planting along all boundaries of the Cottam 2 Site/Sites.	Yes	Open visibility towards Cottam 2 Site/Sites due to the low height of intervening hedgerows and distinct lack of woodland and tree cover. New planting along all the boundaries of the Site/Sites will curtial visibility in Year 1 and help close down some visibility in Year 15.
T040	Access to Corringham Grange, Corringham	High voltage cable corridor and access	267.424302								
T040	Access to Corringham Grange, Corringham	High voltage cable corridor and access	701.483629								
T041	Gainsborough Road, Willoughton	High voltage cable corridor and access	795.882603								
T042	East Lane, Corringham	Cottam 2	357	N	n/a	VP48	East Lane is located within the settlement of Corringham, leading from the centre (junction with Middle Street) towards its eastern extremities. This is a short section of lane with residential properties fronting both sides.	Not applicable	Not applicable	No	No visibility towards Cottam 2 Site/Sites due to the built form within the settlement and to each side of East Lane. The foreground woodland, trees, field hedgerows and the flat- low-lying landform is also likely to curtail views.
T043	Mill Mere Road, Corringham	Cottam 2	632	N	n/a	VP47	Mill Mere Lane is located within the settlement of Corringham, leading from the centre (junction with Middle Street) towards its western extremities. This is a short section of lane with residential properties fronting both sides within the settlement then becoming open countryside and heading west towards the junction with Pilham Lane at Mill Farm.	Not applicable	Not applicable	No	No visibility towards Cottam 2 Site/Sites due to the built form within the settlement and to each side of Mill Mere Lane. The intervening woodland blocks, field hedgerows and the very slightly undualting landform is also likely to curtail views.

T045	From East Lane to A631, Corringham	Cottam 2	0	N	n/a	VP49	East Lane is located to the east of the settlement of Corringham and to the west of the settlement of Hemswell.The lane leads from the 'right-angled' turn in the lane to the north, then heads south to meet with the A631 (Corringham Land). This is a short section of lane with an open arable landscape to each side.	Panels set back from southern boundaries of Cottam 2 Site/Sites.	New planting bordering the southern boundaries (which share a boundary with a spur of a local access track) of the Cottam 2 Site/Sites.	Yes	Open visibility towards Cottam 2 Site/Sites due to the low height of intervening hedgerows and distinct lack of woodland and tree cover. New planting along the southern boundaries of the Site/Sites will curtial visibility in Year 1 and help close down some visibility in Year 15.
T045	From East Lane to A631, Corringham	High voltage cable corridor and access	186.037636								
T045	From East Lane to A631, Corringham	High voltage cable corridor and access	858.421508								
T046	Middle Street, Corringham	Cottam 2	632	N	n/a	VP48	Middle Street is located within the settlement of Corringham leading north south through its centre. This is a short section of road with residential properties to each side.	Not applicable	Not applicable	No	No visibility towards Cottam 2 Site/Sites due to the built form to each side of Middle Street. Beyond the settlement edge, the intervening field hedgerows, field trees and the flat-low-lying landform is also likely to curtail views.
T048	Springthorpe Road, Corringham	Cottam 2	777	N	n/a	VP44	Springthorpe Road is located off the A631 (Corringham Road) between the settlements of Corringham and Springthorpe. This a short section of road, which heads south from the A631, passing the sewage works to join with Hill Road just to the east of Staplegate House.	Not applicable	Not applicable	No	No visibility towards Cottam 2 Site/Sites due to the intervening field hedgerows, field trees, vegetation cover bordering the A631 and the flat- low-lying landform.
T048	Springthorpe Road, Corringham	High voltage cable corridor and access	963.68381								
T049	Grange Lane, Springthorpe	Cottam 2	753	N	n/a	VP45	Grange Lane is located off the A631 (Harpswell Lane) between the settlements of Springthorpe and Harpswell. This a short section of road, which heads south from the A631, to meet at the 'T' junction with School Lane, just to the north of Springthorpe Grange.	Not applicable	Not applicable	No	No visibility towards Cottam 2 Site/Sites due to the intervening field hedgerows, field trees, vegetation cover bordering the A631 and the flat- low-lying landform.
T049	Grange Lane, Springthorpe	High voltage cable corridor and access	341.935546								
T051	School Lane, Springthorpe	High voltage cable corridor and access	0								
T053	Chapel Lane, Springthorpe	High voltage cable corridor and access	970.289327								
T055	Unnamed Road, Springthorpe	High voltage cable corridor and access	989.362737								
T056	Bratt Field Middle Road, Springthorpe	High voltage cable corridor and access	437.824369								
T059	Northlands Road, Glentworth	Cottam 1	581	N	n/a	LCC-C-M	Northlands Road is located to the north and west of the settlement of Glentworth. This road heads northwest from the settlement towards Homeyard Farm, where it takes a 'right-angled' turn, then heading west passing Northlands Cottages. The road then takes a further 'right-angled' turn heading south to meet with Kexby Road.	Panels set back from northern boundaries of Cottam 1 North Site/Sites.	New planting bordering the northern boundaries of the Cottam 1 North Site/Sites.	No	Some open visibility towards the Cottam 1 North Site/Sites. There are no hedgerows bordering the south side of Northlands Road at this location and the lack intervening field hedgerows leaves this as an open view. The slightly undulating landform is likely to curtail some views. New planting along the northern boundaries of the Cottam 1 North Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.
T063	Cow Lane, Upton	High voltage cable corridor and access	0								
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T064	Kexby Road, Glentworth	Cottam 1	474	N	n/a	VP41, LCC-M and LCC-C_N	Kexby Road is located to the west of the settlement of Glentworth and to the northwest of the Settlement of Fillingham. This road heads in almost east west direction (in a 'dog-leg' alignment) heading from Glentworth and extending as far west Cow Lane where it then joins with Glentworth Road. To the south of the road the landscape supports a number of woodland blocks including Oak Wood, Larch Plantation, Turpin Wood, Ash Holt and Fillingham Low Wood.	Panels set back from northern boundaries of Cottam 1 North Site/Sites.	New planting bordering the northern boundaries of the Cottam 1 North Site/Sites.	No	Some open visibility towards the Cottam 1 North Site/Sites. There are no hedgerows bordering the south side of Northlands Road at some locations and the lack intervening field hedgerows leaves this as a partially open view. The numerous woodland blocks and the slightly undulating landform is likely to curtail some views. New planting along the northern boundaries of the Cottam 1 North Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.
T064	Kexby Road, Glentworth	High voltage cable corridor and access	0								
T066	Glentworth Road, Kexby	Cottam 1	759	N	n/a	LCC-C-O	Glentworth Road is located to the east of the settlement of Kexby and to the southeast of the settlement of Upton. This road heads south from Heaton's Wood to meet with Gypsy Lane, where it takes a 'right-angled' turn and then heads west passing Low Farm and Low Farm Cottages as far as the settlement of Kexby.	Not applicable	Not applicable	No	No visibility towards Cottam 1 North Site/Sites due to the intervening woodland blocks, field hedgerows, field trees and the flat-low-lying landform.
Т066	Glentworth Road, Kexby	High voltage cable corridor and access	0.387099								
Т072	Access to Fillingham Grange, Fillingham	Cottam 1	0	N	n/a	VP34	This local track is located to the west of the settlement of Fillingham and serves as access to Fillingham Grange. The track heads from its junction with Willingham Road in the south to meet with Kexby Road in the north and runs in a north south direction, taking a 'dog-leg' turn past Fillingham Grange.	Panels set back from all boundaries of Cottam 1 North Site/Sites where they border this local track.	New planting bordering the boundaries of the Cottam 1 North Site/Sites where they border this local track.	Yes	Open visibility towards Cottam 1 North Site/Sites due to the low height of intervening hedgerows and distinct lack of woodland and tree cover. New planting along the boundaries (where they border this local track) of the Site/Sites will curtial visibility in Year 1 and help close down some visibility in Year 15.
T072	Access to Fillingham Grange, Fillingham	Cottam 1 internal cable corridor	0								
T072	Access to Fillingham Grange, Fillingham	Cottam 1 internal cable corridor	902.241972								
T074	Willingham Road, Fillingham	Cottam 1	0			VP31, VP33, VP37, LCC-CG, LCC-C-H and LCC-C-I	Willingham Road is located to the west of the settlement of Fillingham and to the northwest of the settlement of Ingham. This road heads west from Fillingham at Church Farm as far as Gypsy Lane where it then joins with Fillingham Lane in the west. The road broadly takes an east west alignment with some wide 'dog-leg' turns	Panels set back from all boundaries of Cottam 1 North Site/Sites where they border Willingham Road.	New planting bordering the boundaries of the Cottam 1 North Site/Sites, paticularly where it shares a boundary with Willingham Road.	Yes	Open visibility towards Cottam 1 North Site/Sites due to the low height of intervening hedgerows and distinct lack of woodland and tree cover. New planting along the boundaries (where they border Willingham Road) of the Site/Sites will curtial visibility in Year 1 and help close down some visibility in Year 15.
T074	Willingham Road, Fillingham	Cottam 1 internal cable corridor	5.942175								
T074	Willingham Road, Fillingham	Cottam 1 internal cable corridor	6.756606								
T074	Willingham Road, Fillingham	High voltage cable corridor and access	200.825425								
T074	Willingham Road, Fillingham	High voltage cable corridor and access	790.177461								
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Т075	Fillingham Lane, Willingham	Cottam 1	0	N	n/a	VP37, VP4. LCC-C-K and LCC-C-J	Fillingham Lane is located to the east of the settlement of Willingham by Stow and to the northeast of the settlement of Normanby by Stow. This lane heads east from Willingham by Stow as far as Gypsy Lane where it then joins with Willingham Road in the east. The lane broadly takes an east west alignment with some minor curves.	Panels set back from all boundaries of Cottam 1 North Site/Sites where they border Fillingham Lane.	New planting bordering the boundaries of the Cottam 1 North Site/Sites, particularly where it shares a boundary with Fillingham Lane.	No	Some open visibility towards the Cottam 1 North Site/Sites. There are low hedgerows bordering Fillingham Lane at some locations, but the intervening field hedgerows help to close down views in some parts. The smaller scale field systems (with good hedgerows) and the very slightly undulating landform is also likely to curtail some views. New planting along the boundaries of the Cottam 1 North Site/Sites, especially where it shares a boundary with Fillingham Lane will curtial views in Year 1 and close down visibility in Year 15.
T075	Fillingham Lane, Willingham	High voltage cable corridor and access	202.023616								
T075	Fillingham Lane, Willingham	High voltage cable corridor and access	432.861848								
Т077	Unnamed Road, Ingham	Cottam 1	607	N	n/a	VP26	This unnamed road is located to the south of the settlement of Fillingham and to the north of the settlement of Ingham, where it takes a north south direction across the open, arable landscape.	Panels set back from the east boundaries of Cottam 1 North Site/Sites.	New planting bordering the east boundaries of the Cottam 1 North Site/Sites.	No	Some open visibility towards the Cottam 1 North Site/Sites. There are low hedgerows bordering the road at some locations, but the intervening field hedgerows help to close down views towards the west (particularly at the northern section of the road where it meets with Willingham Road). New planting along the east boundaries of the Cottam 1 North Site/Sites will curtial views in Year 1 and close down visibility in Year 15.
T078	South Lane, Willingham	Cottam 1	65	N	n/a	VP38	South Lane is located to the east of the settlement of Willingham by Stow and to the northeast of Normanby by Stow. The road heads south from Fillingham Lane where it forms a 'T' junction at Magin Moor Farm and Poplar Farm. This is a straight road heading south as far as Moor Farm with no further access.	Panels set back from the north and east boundaries of the Cottam 1 North Site/Sites.	New planting bordering the north and east boundaries of the Cottam 1 North Site/Sites.	No	Some open visibility towards the Cottam 1 North Site/Sites. There are low hedgerows bordering the road at some locations, but the intervening field hedgerows help to close down views towards the west (particularly at the northern section of the road where it meets with Willingham Road). New planting along the east boundaries of the Cottam 1 North Site/Sites will curtial views in Year 1 and close down visibility in Year 15.
Т078	South Lane, Willingham	High voltage cable corridor and access	0								
T078	South Lane, Willingham	High voltage cable corridor and access	685.661362								
T078	South Lane, Willingham	High voltage cable corridor and access	858.495323								
Т079	High Street, Willingham	Cottam 1	729	N	n/a	VP4	High Street is located within the settlement of Willingham by Stow at its northern edge just to the south of Green Farm. The road joins with Stow Road in the west and then heads east to meet with Fillingham Lane at the point where a minor tributary of the River Till passes beneath the road.	Not applicable	Not applicable	No	No visibility towards Cottam 1 North Site/Sites due to the intervening settlement of Willingham by Stow, the sewage works, Grange Farm and the intervening flat-low- lying landform.

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Т082	Grange Lane, Willingham by Stow	Cottam 1	739	N	n/a	VP39	Grange Lane is located within the settlement of Willingham by Stow at its central part. This a short section of lane that joins with High Street in the north and to Stow Road in the southwest of the settlement.	Not applicable	Not applicable	No	No visibility towards Cottam 1 North Site/Sites due to the intervening settlement of Willingham by Stow, the sewage works, Grange Farm and the intervening flat-low- lying landform.
Т083	Cot Garth Lane	Cottam 1	37	N	n/a	VP39	Cot Garth Lane is located within the settlement of Willingham by Stow at its southern edge. This is a straight section of lane that passes across from the B1241 (Stow Road) in the west to meet with Stone Pit Lane in the east. The lane crosses a minor tributary of the River Till to the west of Woods Farm such that the western section of the lane has limited visibility towards the Site/Sites.	from the west boundaries of the Cottam 1 North Site/Sites, where it		No	Some open visibility towards the Cottam 1 North Site/Sites. There are low hedgerows bordering Cot Garth Lane and Stone Pit Lane and the riparian vegetation along the minor tributary of the River Till (and the hedgerow trees) help to close down views towards the east (particularly at the western section of the road where it meets with Stow Road). New planting along the west boundaries of the Cottam 1 North Site/Sites (where it shares a boundary with Stone Pit Lane) will curtial views in Year 1 and close down visibility in Year 15.
T083	Cot Garth Lane	High voltage cable corridor and access	907.096355								
T084	Unnamed Road, Coates by Stow	Cottam 1	0	N	n/a	VP18	Unnamed road to the north of the small settlement of Coates and east of the settlement of Willingham by Stow. This is a north south aligned section of road with some wide 'dog-legs' that skirt to follow field boundaries and water courses. The lane passes from the small settlement of Coates in the south to meet with Willingham Road in the north and provides access to Turpin Farm and Grange Farm. The southern section of the road is distanced form the Cottom 1 North Site/Sites by intervening hedgerows and woodland cover, but the northern section passes directly through the Site/Sites.	Panels set back from the boundaries of the Cottam 1 North Site/Sites, where it shares a boundary with the northern section of the unnamed road.	the Cottam 1 North Site/Sites where it shares	No	Some open visibility towards the Cottam 1 North Site/Sites, but this is mainly experienced from the northern section of the unnamed road. There are low hedgerows bordering arable fields and the riparian vegetation along the minor tributaries of the River Till help to close down viewsat the southern section of the unnamed road. New planting along the boundaries of the Cottam 1 North Site/Sites (where it shares a boundary with the unnamed road) will curtial views in Year 1 and close down visibility in Year 15.
T084	Unnamed Road, Coates by Stow	Cottam 1 internal cable corridor	709.350376								
T084	Unnamed Road, Coates by Stow	Cottam 1 internal cable corridor	869.498798								
T084	Unnamed Road, Coates by Stow	High voltage cable corridor and access	717.051024								
T084	Unnamed Road, Coates by Stow	High voltage cable corridor and access	893.940116								
T085	Stone Pit Lane, Willingham by Stow	Cottam 1	5	N	n/a	VP39	Stone Pit Lane is located to the east of the settlement of Willingham by Stow and to the northeast of the settlement of Normanby by Stow. The lane follows a straight alignment that passes north south from Fillingham Lane, passing the junction with Cot Garth Lane. The road has 'no through' access at the junction with the River Till.	Panels set back from the west boundaries of the Cottam 1 North Site/Sites, where it shares a boundary with Stone Pit Lane	North Site/Sites where it shares	No	Some open visibility towards the Cottam 1 North Site/Sites. There are low hedgerows bordering Cot Garth Lane and Stone Pit Lane and the riparian vegetation along the minor tributary of the River Till (and the hedgerow trees) help to close down views towards the northeast. New planting along the west boundaries of the Cottam 1 North Site/Sites (where it shares a boundary with Stone Pit Lane) will curtial views in Year 1 and close down visibility in Year 15.

T085	Stone Pit Lane, Willingham by Stow	High voltage cable	184.80779								
T085	Stone Pit Lane, Willingham by Stow	corridor and access High voltage cable	685.873904								
T086	Short Lane, Ingham	corridor and access  Cottam 1	876	N	n/a	VP28	Short Lane is located to the northwest of the settlement of Ingham where it forms a 'T' junction with West End. The lane follows a straight north south alignment and shares its pathway with the public bridleway (Ingh/24/2) which then meets with the intersection of public footpath (Ingh/17/1) in the north.	Not applicable	Not applicable	No	No visibility towards Cottam 1 North Site/Sites due to distance, intervening hedgerows and hedgerow trees, and the prevailing flat- low-lying landform.
Т087	Stow Road, Willingham	Cottam 1	136	N	n/a	VP2	Stow Road is located to the south of the settlement of Willingham by Stow and to the north of the settlement of Normanby by Stow. The road leaves Normanby by Stow close to East Farm where there is a crossing with a local tributary of the River Till. There is a further tributary of the River Till that weaves north towards Willingham by Stow running almost parallel to Stow Road.	Not applicable	Not applicable	No	No visibility towards Cottam 1 North Site/Sites due to the proliferation of tributaries of the River Till, that offer dense tracings of riparian vegetation along their length. The intervening riparian vegetation, small-scale field systems, hedgerows, hedgerow trees and the prevailing flat-low-lying landform all help to close down visibility towards the Site/Sites.
T087	Stow Road, Willingham	High voltage cable corridor and access	156.458684								
T087	Stow Road, Willingham	High voltage cable corridor and access	638.700687								
T091	Long Lane, Ingham	Cottam 1	549	N	n/a	VP26	Long Lane is located to the northwest of the settlement of Ingham and is a single track lane that serves Low Farm. The lane follows a straight east west alignment, then taking a 'right-angled' turn at the junction with public foopath (Ingh/26/3) before heading south to towards Low Farm.	Not applicable	Not applicable	No	No visibility towards Cottam 1 North and Cottam 1 South Site/Sites due to distance, the vegetation lining the tributaries of the River Till, the intervening hedgerows and hedgerow trees, and the slightly undulating and low-lying landform.
T091	Long Lane, Ingham	Cottam 1 internal cable corridor	985.156299								
Т092	Marton Road, Willingham	Cottam 1	971	N	n/a	VP2	Marton Road is located to the southwest of Willingham by Stow and to the east of the collection of farmsteads, including Sandebus Farm, Park Farm and High Pastrure Farm. The road leaves Willingham by Stow at the junction with Stow Road and then heads south where it then takes a 'right-angled' turn at the junction with public bridleway (Stow/7/1). The road then heads west to meet with Willingham Road, just to the west of Sandbus Farm.	Not applicable	Not applicable	No	No visibility towards Cottam 1 North and Cottam 1 South Site/Sites due to distance, the intervening settlements of Normanby by Stow and Stow, the vegetation lining the tributaries of the River Till, the intervening hedgerows and hedgerow trees, and the slightly undulating and low- lying landform.
T092	Marton Road, Willingham	High voltage cable corridor and access	496.632372								
T094	Track between South Lane and Coates Lane, Willingham	Cottam 1	178	N	n/a	VP18	The track is located to the west of the small settlement of Coates, passing to the east of a large irregular woodland block known as Normanby Gorse. The track takes a meandering alignment in a north south direction from Coates in the south to meet with South Lane in the north.	Panels set back from the boundaries of the Cottam 1 North Site/Sites, where it shares a boundary with the track.	New planting bordering the boundaries of the Cottam 1 North Site/Sites where it shares a boundary with the track.	No	Some open visibility towards the Cottam 1 North Site/Sites, but mostly contained within the northern section of the route.  The strong presence of Normanby Gorse curtials the majority of views towards the west, northwest and southwest. New planting along the boundaries of the Cottam 1 North Site/Sites (where it shares a boundary with the track) will curtial views in Year 1 and close down some visibility in Year 15.
T094	Track between South Lane and Coates Lane, Willingham	Cottam 1 internal cable corridor	509.004083								
T094	Track between South Lane and Coates Lane, Willingham	High voltage cable corridor and access	497.823596								

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Handle State of Carrier State of State	T094	Track between South Lane and Coates Lane, Willingham	1	544.067012								
Section   Sect	Т096	Coates Lane, Coates by Stow	Cottam 1	0	N	n/a	VP17	passses through the small settlement of Coates. The lane exits  Coates at Grange Farm and passes west to meet with the green lane and bridge crossing over the River Till. The lane follows an east west alignment with a 'dog-leg' section to the	from the boundaries of the Cottam 1 North Site/Sites, where it shares a boundary	bordering the boundaries of the Cottam 1 North Site/Sites where it shares a boundary with	No	the Cottam 1 North Site/Sites, but mostly contained within the western section of the route.  The strong presence of Normanby Gorse curtials the majority of views towards the north. New planting along the boundaries of the Cottam 1 North Site/Sites (where it shares a boundary with the track) will curtial views in Year 1 and close down some visibility
Manufacture (Additional Confession Confessio	Т096	Coates Lane, Coates by Stow	I I	250.62561								
TOTO No makely black bornamby by fixer  TOTO N	T096	Coates Lane, Coates by Stow	I I	946.918726								
Part   Part	T096	Coates Lane, Coates by Stow	" "	540.277851								
Normandy Road, Normandy by Stow  Normandy Road, Normandy by Stow  Normandy Road, Normandy by Stow  Normandy Road, Normandy by Stow  Normandy Road, Normandy by Stow  Normandy Road, Normandy by Stow  Normandy Road, Normandy by Stow and to the seattlement of Normandy by Stow and to the south of the settlement of Coates. The road hash from a Tip Implicit whether the Coates are less of the road that help to close down wires towards to the east of the settlement of Coates. The road hash from a Tip Implicit whether the coates are less of the road that help to close down wires towards to the east of the road that help to close down wires towards the east.  Normandy Road, Stow  Normandy Road, Stow  Normandy Road, Normandy by Stow and to the south of the settlement of Normandy by Stow and to the south of the settlement of Coates. The road that help to close down wires towards the east.  Normandy Road, Stow  Normandy Road, Stow  Normandy Road, Stow  Normandy Road, Stow  Normandy Road, Stow  Normandy Road, Stow  Normandy Road, Stow  Normandy Road, Stow  Normandy Road, Stow  Normandy Road, Stow  Normandy Road, Stow settlement of Normandy Road and the continues north in a straight alignment to meet with coates are all the continues north in a straight alignment to meet with the continues north in a straight alignment to meet with the continues north in a straight alignment to meet with the continues north in a straight alignment to meet with the continues north in a straight alignment to meet with the continues north in a straight alignment to meet with the continues north in a straight alignment to meet with the continues north in a straight alignment to meet with the continues north in a straight alignment to meet with the continues north in a straight alignment to meet with the continues north in a straight alignment to meet with the continues north in the straight and the tributers. It is north straight and the continues north in the straight and the continues north in the straight and the continues north in the straight	Т097	Normanby Road, Normanby by Stow	Cottam 1	4	N	n/a	VP2	the settlement at the junction with Church Road. The road takes a slight meandering alignment passing residential properties and farmsteads known as Flat Tops, West Farm and East Farm, before taking a straight route and then	from the boundaries of the Cottam 1 North Site/Sites, where the road passes the section at East Farm, West Farm	bordering the boundaries of the Cottam 1 North Site/Sites where it shares a boundary with the section of road at East Farm, West Farm and Flat	No	the Cottam 1 North Site/Sites, but mostly concentrated within the section of the route that passes East Farm, West Farm and Flat Tops. The presence of the River Till and its riparian vegetation curtials the majority of views towards the northeast and east. New planting along the boundaries of the Cottam 1 North Site/Sites (where it shares a boundary with this section of road) will curtial views in Year 1 and close down
TOBB Unamed Road, Stow Cottam I mermal cases cash condor where the state of the settlement of Normanby by Stow and to the south of fine settlement of Normanby by Stow and to the south of fine settlement of Normanby by Stow and to the south of fine settlement of Normanby by Stow and to the south of fine settlement of Normanby by Stow and to the south of fine settlement of Normanby by Stow and to the south of fine settlement of Normanby by Stow and to the south of fine settlement of Normanby by Stow and to the south of the settlement of Caster. Fire and heads from a "J sunction with highly and Road and then continues north in a straight alignment to meet with Caster lane just to the south of Grange Farm. Here are two rectangular woodland blocks to the east of the road that help to disard where the settlement of Self-fixed with the silent woodland blocks, the vegetation lining the River Till and its tributation and the heads were to disard where the settlement of Normanby by Stow. This section of the lane passes from the Junction with pressible and office of the settlement of Normanby by Stow. This section of the lane passes from the Junction with the residential properties known as Flut Tops.  Tops (Castes Lane, Stow)  Cottam I north. Rever planting along the Cottam I North Size/Sizes, where there is a shared boundary with Coates Lane. Shared boundary with Coates Lane is located to the east of the settlement of Normanby by Stow. This section of the lane passes from the Junction with the residential properties known as Flut Tops.  Panels set back from the Size Size Size Size Size Size Size Siz	T097	Normanby Road, Normanby by Stow	1	0								
Togs Unnamed Road, Stow Cottam 1 internal Cole Cottam 1 and Social Management of Normanby by Stow and to the settlement of Normanby by Stow and to the south of the settlement of Normanby by Stow and to the south of the settlement of Normanby by Stow and to the south of the settlement of Normanby by Stow and to the south of Simple Family. There are not rectangular woodland blocks to the east of the road that help to close down views towards the east.  Togs Unnamed Road, Stow Cottam 1 internal Cole Corridor  Cottam 1 internal Cole Corridor  Cottam 1 internal Cole Corridor  Sel 1742893  Cottam 1 internal Cole Corridor  Cottam 1 internal Cole Corridor  Cottam 1 internal Cole Corridor  Normanby by Stow. This section of the lane passes from the boundaries of the Cottam 1 North Site/Sites. Use and the Normanby Road at the boundaries of the Cottam 1 North Site/Sites where the should contain so the contain South and the Normanby Road at the should we set to meet with Normanby Road at the should we set to meet with Normanby Road at the should we set to meet with Normanby Road at the Normanby Ro	Т097	Normanby Road, Normanby by Stow	1	594.396858								
Unnamed Road, Stow cable corridor SS1.742893  Coates Lane, Stow Cottam 1  Co	T098	Unnamed Road, Stow	Cottam 1	0	N	n/a	VP18	Normanby by Stow and to the south of the settlement of Coates. The road heads from a 'T' junction with Ingham Road and then continues north in a straight alignment to meet with Coates Lane just to the south of Grange Farm. There are two rectangular woodland blocks to the east of the road that help	Not applicable	Not applicable	No	North and Cottam 1 South Site/Sites due to distance, the intervening rectangular woodland blocks, the vegetation lining the River Till and its tributaries, the intervening hedgerows and hedgerow trees, and the slightly undulating and low-
Coates Lane is located to the east of the settlement of Normanby by Stow. This section of the lane passes from the boundaries of the Cottam 1 North Site/Sites. The strong presence of roadside hedgerows curtials the majority of views towards the majority of views towards the north. New planting bordering the boundaries of the Cottam 1 North Site/Sites. Where there is a shared boundary with Coates Lane.  Top9  Coates Lane, Stow  Cottam 1  O  N  n/a  VP19  Incident the east of the east of the east of the east of the east of the east of the settlement of Normanby by Stow. This section of the lane passes from the boundaries of the Cottam 1 North Site/Sites, where there is a shared boundary with Coates Lane.  New planting bordering the boundaries of the Cottam 1 North Site/Sites. The strong presence of roadside hedgerows curtials the majority of views towards the north. New planting along the Cottam 1 North Site/Sites where there is a shared boundary with Coates Lane.  Top9  Coates Lane Strow  Cottam 1 internal	T098	Unnamed Road, Stow	I I	581.742893								
11099 1 Coates Lane Stow	Т099	Coates Lane, Stow		0	N	n/a	VP19	Normanby by Stow. This section of the lane passes from the junction with green lane and bridge crossing over the River Till and then heads west to meet with Normanby Road at the	from the boundaries of the Cottam 1 North Site/Sites, where there is a shared boundary with	bordering the boundaries of the Cottam 1 North Site/Sites where there is a shared boundary with	Yes	the Cottam 1 North Site/Sites. The strong presence of roadside hedgerows curtials the majority of views towards the north. New planting along the boundaries of the Cottam 1 North Site/Sites (where it shares a boundary with Coates Lane) will curtial views in Year 1 and close down some visibility
<u>, , , , , , , , , , , , , , , , , , , </u>	Т099	Coates Lane, Stow	I I	252.228836								
T099 Coates Lane, Stow High voltage cable corridor and access 272.622439	T099	Coates Lane, Stow	High voltage cable	272.622439								

Т099	Coates Lane, Stow	High voltage cable corridor and access	549.549347								
T100	Willingham Road, Marton	High voltage cable corridor and access	761.791749								
T100	Willingham Road, Marton	Shared cable corridor and access	903.584062								
T104	Unnamed Road, Stow	Cottam 1	323	N	n/a	VP16	The unnamed road is located to the south of the small settlement of Coates and to the east of the settlement of Stow. The road heads from a 'T' junction with Ingham Road and then continues north in a straight alignment to meet with Coates Lane just to the west of Hall Farm. The River Till and a minor tributary pass to the west of the road in a meandering north south alignment and are clothed in riparian vegetation, which closes down views towards the west. There is also a polar shelterbelt to the northeast of Squire's Bridge.	Not applicable	Not applicable	No	No visibility towards Cottam 1 North due to the poplar shelterbelt and the vegetation lining the River Till and its tributaries. The slightly undulating and low-lying landform also helps to curtial visibility towards the south from this route.
T104	Unnamed Road, Stow	Cottam 1 internal cable corridor	787.548008								
T104	Unnamed Road, Stow	Cottam 1 internal cable corridor	956.440137								
T105	Stow Lane, Ingham	Cottam 1	0	N	n/a	VP16 and VP23	Stow Lane is located to the south of Ingham and to the north of Cammeringham where it follows a straight east west alignment. The lane forms a 'T' junction with the B1398 (Lincoln Road) in the east and then continues west to join with Ingham Road at Furze Hill.	Panels set back from the boundaries of the Cottam 1 North Site/Sites, where the lane passes close at Blackthorn Hill.	the Cottam 1 North Site/Sites where the lane	No	Limited visibility towards Cottam 1 North Site/Sites due to the distance and the vegetation lining the River Till and its tributaries. The slightly undulating and low-lying landform combined with the hedgerows and tree cover also helps with curtailing views towards the north and south from the lane. The lane passes close to a short section of the Site/Sites at its western end before crossing a minor tributary of the River Till at Blackthorn Hill, but the distance and layering of hedgerows helps to curtail visibility. New planting along the boundaries of the Cottam 1 North Site/Sites (where it shares a boundary with this section of Stow Lane) will curtial views in Year 1 and close down some visibility in
T105	Stow Lane, Ingham	Cottam 1 internal cable corridor	0								
T106	Normanby Road, Stow	Cottam 1	8	N	n/a	VP2	Normanby Road is located to the northwest of the settlement of Stow where it exits the northern edge to meet with Church Road. This is a short section of road which has a slightly meandering alignment with agricultural fields to each side. There is a strong network of hedgerows with an abundance of mature trees to each side of the road.	Not applicable	Not applicable	No	No visibility towards Cottam 1 North due to the distance, the intervening small-scale field systems with a strong hedgerow network and mature trees.
T106	Normanby Road, Stow	High voltage cable corridor and access	272.622439								
T106	Normanby Road, Stow	High voltage cable corridor and access	832.324886								

Т107	Ingham Road, Stow	Cottam 1	0	N	n/a	VP15 and VP16 and LCC-C-A	Ingham Road is located to the east of the settlement of Stow and takes an east west route to join with Stow Lane at the small settlement of Furze Hill. The road has a straight alignment and passes through the small settlement of Stow Pasture. It is bordered by small to medium scale field systems to each side with a strong hedgerow network and occasional blocks of trees.	Panels set back from the boundaries of the Cottam 1 North Site/Sites, where the lane passes close to the small settlement of Stow Pasture.	New planting bordering the boundaries of the Cottam 1 North Site/Sites where the lane passes close to the small settlement of Stow Pasture.	No	Limited visibility towards Cottam 1 North due to the slightly undulating and low- lying landform combined with the hedgerows and tree cover that helps with curtailing views. The road passes close to a short section of the Site/Sites at its eastern end near to Squire's Bridge, but the distance and layering of hedgerows helps to curtail visibility. New planting along the boundaries of the Cottam 1 North Site/Sites (where it shares a boundary with this section of Ingham Road) will curtial views in Year 1 and close down some visibility in Year 15.
T107	Ingham Road, Stow	Cottam 1 internal	0								
T107	Ingham Road, Stow	cable corridor  Cottam 1 internal cable corridor	334.344237								
T107	Ingham Road, Stow	Cottam 1 internal	582.242372								
T107	Ingham Road, Stow	cable corridor  High voltage cable corridor and access	580.961998								
T108	Church Road, Stow	Cottam 1	252	N	n/a	VP15 and VP16 and LCC-C-A	Church Road is located to the northwest of the settlement of Stow where it exits the northern edge to meet with Normanby Road. This is a short section of road which has a 'dog-leg' alignment. There are agricultural fields to each side of the northern part of the route and residential properties to the south.	Not applicable	Not applicable	No	No visibility towards Cottam 1 North due to the distance, the intervening built form and small- scale field systems with a strong hedgerow network and mature trees.
T108	Church Road, Stow	High voltage cable corridor and access	451.201679								
Т109	Unnamed Road, Stow	Cottam 1	0	N	n/a	VP12	This unnamed road is located to the south of the settlement of Coates, where it exits Ingham Road and takes a meandering alignment through the arable fields and then bends back to rejoin Ingham Road at the junction with Stow Lane. The road shares its route with a public bridleway (Camm/31/1) which passes Furze Hill and Lower Furze Hill at which point the bridleway continues east along the unnamed road and then south towards Thorpe Wood.	Panels set back from the boundaries of the Cottam 1 South Site/Sites, where the unnamed road passes close.	New planting bordering the boundaries of the Cottam 1 South Site/Sites where the unnamed road passes close.	No	Limited visibility towards Cottam 1 South Site/Sites due to the distance, slightly undulating and low-lying landform combined with the hedgerows and tree cover that helps with curtailing views. The road passes close to a short section of the Site/Sites at its northeastern end near to Lower Furze Hill, but the layering of hedgerows helps to curtail visibility. New planting along the boundaries of the Cottam 1 South Site/Sites (where it shares a boundary with this section of road) will curtial views in Year 1 and close down some visibility in Year 15.
T109	Unnamed Road, Stow	Cottam 1 internal cable corridor	495.272701								
T109	Unnamed Road, Stow	Cottam 1 internal cable corridor	953.49381								

T110	Blackthorn Lane, Cammeringham	Cottam 1	0	N	n/a	LCC-C-D	Blackthorn Lane is located to the west of Cammeringham. The lane passes in a long straight alignment east west from the B1398 in Cammeringham passing residential properties at Blackthorn Hill as far as Cold Harbour and Furze Hill.	Panels set back from the boundaries of the Cottam 1 South Site/Sites, where Blackthorn Lane passes through the Site/Sites at the western end of the lane.	the Site/Sites at	Yes	Some visibility towards Cottam 1 South at the western end of the lane where it passes through the Site/Sites. The low- lying landform combined with the hedgerows helps with curtailing views. New planting along the boundaries of the Cottam 1 South Site/Sites (where it shares a boundary with this section of Blackthorn Lane) will curtial views in Year 1 and help close down some visibility in Year 15.
T110	Blackthorn Lane, Cammeringham	Cottam 1 internal cable corridor	240.629313								
T112	School Lane, Stow	Cottam 1	636	N	n/a	VP2	School Lane is located within the settlement of Stow at its eastern edge. The lane has residential properties to each side. The lane passes in a north south alignment linking Ingham Road with Church Road.	Not applicable	Not applicable	No	No visibility towards Cottam 1 North and South Site/Sites, due to the distance, the intervening built form and small-scale field systems with a strong hedgerow network and mature trees.
T112	School Lane, Stow	High voltage cable corridor and access	693.662651								
T113	Furze Hill, Stow	Cottam 1	203	N	n/a	VP12	Furze Hill is located to the south of Ingham Road and to the east of the residential property and farmstead known as Lower Furze Hill. The route shares its path with bridleway (Camm/31/1) where it heads south passing Thorpe Wood as far as the residential property known as The Grange.	Panels set back from the boundaries of the Cottam 1 North Site/Sites, where the route passes close to the Site/Sites to the north of Thorpe Wood.	New planting bordering the boundaries of the Cottam 1 South Site/Sites, where the route passes close to the Site/Sites to the north of Thorpe Wood.	No	Some visibility towards Cottam 1 South Site/Sites at the northern end of the lane to the north of Thorpe Wood. The low- lying landform combined with the hedgerows helps with curtailing views. New planting along the boundaries of the Cottam 1 South Site/Sites (where it lies close to the boundary with this section of the route) will curtial views in Year 1 and help close down some visibility in Year 15.
T113	Furze Hill, Stow	Cottam 1 internal	683.699196								
T113	Furze Hill, Stow	Cottam 1 internal	802.726701								
T113	Furze Hill, Stow	cable corridor Cottam 1 internal	875.368185								
T114	Church Lane, Stow	Cottam 1 High voltage cable	762	N	n/a	LCC-C-A	Church Road is located to the southwest of the settlement of Stow where it exits the southern edge to meet with Stow Park Road. This is a short section of road which has a 'dog-leg' alignment. There is built form to each side of the road.	Not applicable	Not applicable	No	No visibility towards Cottam 1 North and South Site/Sites, due to the distance and the intervening built form.
T114	Church Lane, Stow	corridor and access	477.9166								
T116	Sturton Road, Stow	Cottam 1	797	N	n/a	LCC-C-B	Sturton Road is located to the south of the settlement of Stow where it exits the settlement at the junction with Stow Park Road. The road takes a meandering alignment to join with Stow Road at the settlement of Sturton by Stow. The road is open between the two settlements with agricultural land to each side after passing to the south of Old Rectory Farm.	Not applicable	Not applicable	No	No visibility towards Cottam 1 South Site/Sites, due to the distance and the intervening built form. The low-lying landform combined with the intervening hedgerows also close down visibility at this location.
T116	Sturton Road, Stow	High voltage cable corridor and access	568.081408								
T117	Unnamed Road, Stow	High voltage cable corridor and access	102.386274								
	-1	1	I	L	-		1		1		

T123	Stow Road, Sturton by Stow	corridor and access	811.5464								
T122	Unnamed Road, Stow	cable corridor High voltage cable	375.894452								
T122	Unnamed Road, Stow	Cottam 1  Cottam 1 internal	275 904/652	N	n/a	VP11	This section of road is located to the north and west of Thorpe le Fallows and passes in an east west direction where it then takes a 'right-angled' turn to head south and meet with Thorpe Lane to the west of the War Memorial.	Panels set back from the boundaries of the Cottam 1 South Site/Sites, where unnamed road shares a boundary.	South Site/Sites, where the unnamed road	Yes	Some visibility towards Cottam 1 South Site/Sites where the unnamed road passes through and along the northern boundary of the Site/Sites. New planting along the boundaries of the Cottam 1 South Site/Sites (where it lies close to the boundary with this section of the route) will curtial views in Year 1 and help close down some visibility in Year 15.
T121	Unnamed Road, Brattleby	Cottam 1 internal cable corridor	870.412883								
T121	Unnamed Road, Brattleby	cable corridor  Cottam 1	6	N	n/a	LCC-C-D	The unnamed road is located to the west of Cammeringham and to the north of Thorpe Lane. The road follows an almost straight alignment that passes in a north south direction. There are a number of woodlands within the immediate landscape, including Brattleby Gorse, South Spinney and Beck Spinney.	Not applicable	Not applicable	No	Very little visibility towards Cottam 1 South due to the presence of large woodland blocks that form strong features in the landscape and close down views across the area.
T120	Unnamed Road, Stow	Cottam 1 internal	768.150643								
T120	Unnamed Road, Stow	Cottam 1	0	N	n/a	VP11	The unnamed road is located to the west of Thorpe Wood and to the north of the settlement of Thorpe le Fallows. The road is a very short section that passes in a north south direction.	Not applicable	Not applicable	No	Limited visibility towards Cottam 1 South Site/Sites, due to the intervening hedgerows and the strong presence of Thorpe Wood. The low-lying landform combined with the intervening hedgerows helps close down visibility at this location.
T119	Fleets Lane, Sturton by Stow	Cottam 1 internal cable corridor	698.60787								
T119	Fleets Lane, Sturton by Stow	Cottam 1 internal cable corridor	125.160751								
T119	Fleets Lane, Sturton by Stow	Cottam 1 internal cable corridor	4.941172								
T118	Fleets Lane, Sturton by Stow	corridor and access	0	N	n/a	VP1	Fleets Lane is located to the east of the settlements of Stow and Sturton by Stow where it passes in a north south direction between Ingham Road and Fleets Road. The lane follows an almost straight alignment with a few shallow turns to take account of smaller-scale field patterns to the south of the route. The lane is bordered by hedgerows to each side that are low cut in some parts and which allow views across their bounds.	Panels set back from the boundaries of the Cottam 1 South Site/Sites, where Fleets Lane shares a boundary.	New planting bordering the boundaries of the Cottam 1 South Site/Sites, where Fleets Lane shares a boundary.	Yes	Some visibility towards Cottam 1 South Site/Sites at the northern end of the lane where the boundary is shared with Fleets's Lane. The low-lying landform combined with the hedgerows helps with curtailing views. New planting along the boundaries of the Cottam 1 South Site/Sites (where it lies close to the boundary with this section of the route) will curtial views in Year 1 and help close down some visibility in Year 15.
		High voltage cable					Farm and Danes Farm.				close down visibility at this location.
T118	Stow Park Road, Stow	Cottam 1	797	N	n/a	LCC-C-A	Stow Park Road is located to the southwest of the settlement of Stow where it exits the settlement to link with the A15 (Till Bridge Lane). The road is open to each side with agricultural land and only a small ribbon development between Highfield	Not applicable	Not applicable	No	No visibility towards Cottam 1 South Site/Sites, due to the distance and the intervening built form at Stow. The low- lying landform combined with the intervening hedgerows also

T125	Thorpe Lane, Brattleby	Cottam 1	3	N	n/a	VP4	Thorpe Lane is located to the north of the A15 Till Bridge Road, where it follows an east west alignment passing between the settlements of Sturton by Stow and Brattleby. The lane follows an east west route with a 'dog-leg' section where it joins with Lowfields that serves the settlement of Aisthorpe.	Panels set back from the boundaries of the Cottam 1 South Site/Sites, where Thorpe Lane shares a boundary at the western end of the route.	South Site/Sites, where the Thorpe Lane shares a	No	Some visibility towards Cottam 1 South Site/Sites where the Thorpe Lane shares a boundary with the Site/Sites. New planting along the boundaries of the Cottam 1 South Site/Sites (where it lies close to the boundary with this section of the route) will curtial views in Year 1 and help close down some visibility in Year 15.
Т127	Thorpe Lane, Thorpe in the Fallows	Cottam 1	0	N	n/a	VP7	Thorpe Lane is located to the north of the A15 Till Bridge Road, where it follows an east west alignment passing between the settlements of Sturton by Stow and Brattleby. The lane follows an east west route with a 'dog-leg' section where it joins with Lowfields that serves the settlement of Aisthorpe.	Panels set back from the boundaries of the Cottam 1 South Site/Sites, where Thorpe Lane shares a boundary.	South Site/Sites, where the Thorpe Lane	No	Some visibility towards Cottam 1 South Site/Sites where the Thorpe Lane shares a boundary with the Site/Sites. New planting along the boundaries of the Cottam 1 South Site/Sites (where it lies close to the boundary with this section of the route) will curtial views in Year 1 and help close down some visibility in Year 15.
T127	Thorpe Lane, Thorpe in the Fallows	Cottam 1 internal cable corridor	632.752999								
T127	Thorpe Lane, Thorpe in the Fallows	Cottam 1 internal	991.290352								
T128	Marton Road, Sturton by Stow (A1500)	cable corridor  High voltage cable corridor and access	854.211395								
T129	Fleets Road, Sturton by Stow	Cottam 1	134	N	n/a	VP9	Fleet's Road is located to the east of the settlement of Sturton by Stow where it exits the settlement to join with Thorpe Lane. This is a short section of road that takes an almost east west alignment with bordering hedgerows and some tree cover to each side.	Not applicable	Not applicable	No	No visibility towards Cottam 1 South Site/Sites due to the intervening hedgerows that combined with the low-lying landform helps to close down views across the area.
T129	Fleets Road, Sturton by Stow	Cottam 1 internal cable corridor	984.675723								
T129	Fleets Road, Sturton by Stow	Cottam 1 internal cable corridor	992.638315								
T131	Thorpe Lane, Sturton by Stow	Cottam 1	140	N	n/a	VP8	Fleet's Road is located to the east of the settlement of Sturton by Stow where it forms a junction with the A15 (Till Bridge Lane) and then meets with Fleet's Road. This is a short section of road that takes an almost north south alignment with bordering hedgerows and some tree cover to each side.	Not applicable	Not applicable	No	No visibility towards Cottam 1 South Site/Sites due to the intervening hedgerows that combined with the low-lying landform helps to close down views across the area.
T131	Thorpe Lane, Sturton by Stow	Cottam 1 internal cable corridor	987.555511								
T132	Lowfields, Aisthorpe	Cottam 1	602	N	n/a	VP4	Lowfields is located to the north of the A15 Till Bridge Road, where it follows an east west alignment passing between the settlements of Sturton by Stow and Aisthorpe. The lane follows an east west route with a 'dog-leg' section where it joins with Thorpe Lane that serves the settlement of Brattleby.	Not applicable	Not applicable	No	No visibility towards Cottam 1 South Site/Sites due to the intervening hedgerows that combined with the low-lying landform helps to close down views across the area.
T133	Tillbridge Road, Sturton by Stow (A1500)	Cottam 1	590	N	n/a	VP3	Till Bridge Road is located to the south of Thorpe le Fallows, where it follows an almost east west alignment between the settlement of Sturton by Stow and the A15 (Ermine Street).	Not applicable	Not applicable	No	No visibility towards Cottam 1 South Site/Sites due to the intervening hedgerows that combined with the low-lying landform helps to close down views across the area.
T134	Lincoln Lane, Thorpe in the Fallows	Cottam 1	98	N	n/a	VP4	Lincoln Lane passes from Till Bridge Road and heads north to meet with Lowfields, Aisthorpe. The road follows an almost north south direction.	Not applicable	Not applicable	No	No visibility towards Cottam 1 South Site/Sites due to the intervening hedgerows that combined with the low-lying landform helps to close down views across the area.
T135	Tillbridge Lane, Sturton by Stow (A1500)	Cottam 1	592	N	n/a	VP3	Till Bridge Road is located to the south of Thorpe le Fallows, where it follows an almost east west alignment between the settlement of Sturton by Stow and the A15 (Ermine Street).	Not applicable	Not applicable	No	No visibility towards Cottam 1 South Site/Sites due to the intervening hedgerows that combined with the low-lying landform helps to close down views across the area.

T138	Main Street, Bransby	Cottam 1 691	L N	n/a	VP3	Till Bridge Road is located to the south of Thorpe le Fallows, where it follows an almost east west alignment between the settlement of Sturton by Stow and the A15 (Ermine Street).	Not applicable	Not applicable	No	No visibility towards Cottam 1 South Site/Sites due to the intervening hedgerows that combined with the low-lying landform helps to close down views across the area.
T139	Tillbridge Lane, Scampton (A1500)	Cottam 1 892	2 N	n/a	VP2	Till Bridge Road is located to the south of Thorpe le Fallows, where it follows an almost east west alignment between the settlement of Sturton by Stow and the A15 (Ermine Street).	Not applicable	Not applicable	No	No visibility towards Cottam 1 South Site/Sites due to the intervening hedgerows that combined with the low-lying landform helps to close down views across the area.
T141	Access track to Manor Farm	High voltage cable co	) N	n/a			Not applicable	Not applicable	No	
T142	Tillbridge Lane, Stow	High voltage cable co	N N	n/a			Not applicable	Not applicable	No	
T142	Tillbridge Lane, Stow	Shared cable corridor 826	5 N	n/a			Not applicable	Not applicable	No	
T143	Stow Park Road, Stow Park	High voltage cable co	) N	n/a			Not applicable	Not applicable	No	
T143	Stow Park Road, Stow Park	Shared cable corridor 47	7 N	n/a			Not applicable	Not applicable	No	
T144	Stow Park Road, Marton	Abnormal loads acces	) N	n/a			Not applicable	Not applicable	No	
T144	Stow Park Road, Marton	High voltage cable co	) N	n/a			Not applicable	Not applicable	No	<del>                                     </del>
T144	Stow Park Road, Marton	Shared cable corridor	D N	n/a			Not applicable	Not applicable	No	1
T145	Littleborough Lane, Marton	Abnormal loads acces	S N	n/a			Not applicable	Not applicable	No	+
T145	Littleborough Lane, Marton	Shared cable corridor 421		n/a			Not applicable	Not applicable	No	+
T146	High Street, Marton	Abnormal loads acces	) N	n/a			Not applicable	Not applicable	No	+
T146	High Street, Marton	High voltage cable col 999		n/a			Not applicable	Not applicable	No	+
T146	High Street, Marton	Shared cable corridor		n/a			Not applicable	Not applicable	No	+
T147	Trent Port Road, Marton	Abnormal loads acces 181		n/a			Not applicable	Not applicable	No	+
T147	· · · · · · · · · · · · · · · · · · ·	Shared cable corridor 179		<del></del>				<del></del>		+
	Trent Port Road, Marton			n/a			Not applicable	Not applicable	No	+
T148	Lea Road, Brampton	Abnormal loads acces 911		n/a			Not applicable	Not applicable	No	+
T148	Lea Road, Brampton	Shared cable corridor (	) N	n/a			Not applicable	Not applicable	No	
T149	Coates Road, Coates	Shared cable corridor 178		n/a			Not applicable	Not applicable	No	
T150	Headstead Bank, Cottam	Shared cable corridor	- "	n/a			Not applicable	Not applicable	No	
T151	Town Street	Shared cable corridor (	) N	n/a			Not applicable	Not applicable	No	
T152	Marsh Lane, Cottam	Shared cable corridor (	) N	n/a			Not applicable	Not applicable	No	
T153	Broad Lane, Cottam	Shared cable corridor 2	2 N	n/a			Not applicable	Not applicable	No	
T154	Overcoat Lane, Cottam	Shared cable corridor	) N	n/a			Not applicable	Not applicable	No	
T155	Wells Lane, Cottam	Shared cable corridor	) N	n/a			Not applicable	Not applicable	No	
T156	Outgang Road, Cottam	Shared cable corridor 65	5 N	n/a			Not applicable	Not applicable	No	
T157	Outgang Lane, Cottam	Abnormal loads acces 523	B N	n/a			Not applicable	Not applicable	No	
T157	Outgang Lane, Cottam	Shared cable corridor (	) N	n/a			Not applicable	Not applicable	No	
T158	Cow Pasture Lane, South Leverton	Shared cable corridor (	) N	n/a			Not applicable	Not applicable	No	
T159	Westbrecks Lane, South Leverton	Abnormal loads acces 824	1 N	n/a			Not applicable	Not applicable	No	
T159	Westbrecks Lane, South Leverton	Shared cable corridor 196	5 N	n/a			Not applicable	Not applicable	No	
T160	Torksey Ferry Road. Rampton	Shared cable corridor (	) N	n/a			Not applicable	Not applicable	No	
T161	Nightleys Road, Rampton	Shared cable corridor 0	) N	n/a			Not applicable	Not applicable	No	
T162	Shortleys Road, Rampton	Shared cable corridor (	) N	n/a			Not applicable	<del>                                     </del>	No	
T163	Railway, Blyton	Cottam 3A option are 388		,			1,1,2,2,2	1,7		
T163	Railway, Blyton	Cottam 3A option are 333								1
T163	Railway, Blyton	Cottam 3B option are	7					<del>                                     </del>		†
T163	Railway, Blyton	Cottam 3B option are	ıl .							+
T163	Railway, Blyton	High voltage cable co								+
T164	Railway, Stow Park Road	High voltage cable co						<del>                                     </del>		+
T164	Railway, Stow Park Road	Shared cable corridor 406	1					<del>                                     </del>		+
T165	Railway, Cottam Power Station	Shared cable corridor C		+				<del>                                     </del>		+
1103	manway, Cottain rower station	Silarea cable corridor	1			1	<u> </u>			



# Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.4.1: Transport Receptors – Transport Cumulative [Reference: EN010133/APP/C6.3.8.3.4.1.2] January 2023

Viewpoint	Location	Bumble Bee Farm	Field Farm	Gate Burton Energy Farm	High Marnham Solar	Tillbridge Solar	West Burton	Potential Intervisibility	Potential Intervisibility Justification
T004	Lane to Mount Pleasant Farm off C229, Scotton								Already Scoped Out
T006	Park Lane, Laughton near Gainsborough								Already Scoped Out
Т010	Unnamed Road, Laughton near Gainsborough	N	N	N	N	Y	N		Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
T011	Unnamed Road, Laughton near Gainsborough								Already Scoped Out
T012	Dring Lane, Laughton near Gainsborough	Y	N	Y	N	Υ	N		Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
T013	Gainsborough Road, Laughton near Gainsborough (A159)	Y	Y	N	N	N	N		Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
T014	Blyton Road, Laughton near Gainsborough	Y	Y	N	N	Y	N		Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
T015	Lane to Grange Farm off B1205, Northorpe near Scotter	_		1			1		Already Scoped Out
Т016	B1205 Kirton Road to C228 Monson Road, Northorpe near Scotter	Y	N	Y	N	Y	N		Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T016 (B1205 Kirton Road to C228 Monson Road, Northorpe near Scotter), the receptor is approximately 12.3 km to Bumble Bee Farm, 10.5 km from Gate Burton Energy Farm and 5.4 km from Tillbridge Solar site and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.

T016	B1205 Kirton Road to C228 Monson Road, Northorpe near Scotter	Y	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T016 (B1205 Kirton Road to C228 Monson Road, Northorpe near Scotter), the receptor is approximately 12.3 km to Bumble Bee Farm, 10.5 km from Gate Burton Energy Farm and 5.4 km from Tillbridge Solar site and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
T016	B1205 Kirton Road to C228 Monson Road, Northorpe near Scotter	Y	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T016 (B1205 Kirton Road to C228 Monson Road, Northorpe near Scotter), the receptor is approximately 12.3 km to Bumble Bee Farm, 10.5 km from Gate Burton Energy Farm and 5.4 km from Tillbridge Solar site and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
T018	Laughton Road, Blyton (A159)	N	N	N	N	Y	N	Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
T018	Laughton Road, Blyton (A159)	N	N	N	N	Y	N	Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.

T019	Kirton Road, Blyton	N	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T019 (Kirton Road, Blyton), the receptor is approximately 9.1 km to Gate Burton Energy Farm and 4.2 km to Tillbridge Solar site and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
T019	Kirton Road, Blyton	N	N	Y	N	Υ	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T019 (Kirton Road, Blyton), the receptor is approximately 9.1 km to Gate Burton Energy Farm and 4.2 km to Tillbridge Solar site and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
T019	Kirton Road, Blyton	N	N	Υ	N	Υ	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T019 (Kirton Road, Blyton), the receptor is approximately 9.1 km to Gate Burton Energy Farm and 4.2 km to Tillbridge Solar site and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.

T021	Bonsdale Lane, Blyton	N	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T021 (Bonsdale Lane, Blyton), the receptor is approximately 8.8 km to Gate Burton Energy Farm and 3.6 km to Tillbridge Solar Site and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
T021	Bonsdale Lane, Blyton	N	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T021 (Bonsdale Lane, Blyton), the receptor is approximately 8.8 km to Gate Burton Energy Farm and 3.6 km to Tillbridge Solar Site and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
T021	Bonsdale Lane, Blyton	N	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T021 (Bonsdale Lane, Blyton), the receptor is approximately 8.8 km to Gate Burton Energy Farm and 3.6 km to Tillbridge Solar Site and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.

T021	Bonsdale Lane, Blyton	N	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T021 (Bonsdale Lane, Blyton), the receptor is approximately 8.8 km to Gate Burton Energy Farm and 3.6 km to Tillbridge Solar Site and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
T022	High Street, Blyton (A159)							Already Scoped Out
T022	High Street, Blyton (A159)							Already Scoped Out
T023	Station Road, Blyton							Already Scoped Out
T023	Station Road, Blyton							Already Scoped Out
T023	Station Road, Blyton							Already Scoped Out
T025	Pilham Lane, Bonsdale	N	N	Y	N	Y	N	Cottam 3a and 3b are not visibile therefore no potential cumulative intervisibility.
T025	Pilham Lane, Bonsdale	N	N	Y	N	Y	N	Cottam 2, 3a and 3b are not visibile therefore no potential cumulative intervisibility.
T025	Pilham Lane, Bonsdale	N	N	Y	N	Y	N	Cottam 2, 3a and 3b are not visibile therefore no potential cumulative intervisibility.
T028	Green Lane, Pilham	N	N	Y	N	Y	N	Cottam 2, 3a and 3b are not visibile therefore no potential cumulative intervisibility.
T028	Green Lane, Pilham	N	N	Y	N	Y	N	Cottam 2, 3a and 3b are not visibile therefore no potential cumulative intervisibility.
T028	Green Lane, Pilham	N	N	Y	N	Y	N	Cottam 2, 3a and 3b are not visibile therefore no potential cumulative intervisibility.
T029	Pilham Lane, Blyton		1			1		Already Scoped Out
T032	Road to Dunstall, Aisby near Gainsborough		1		1	1		Already Scoped Out  Already Scoped Out
T032	Road to Dunstall, Aisby near Gainsborough				1	1		Already Scoped Out
T032	Road to Dunstall, Aisby near Gainsborough				1			Already Scoped Out
T034	Pilham Lane, Aisby near Gainsborough	N	N	Y	N	N	N	Cottam 2, 3a and 3b are not visibile therefore no potential cumulative intervisibility.
Т034	Pilham Lane, Aisby near Gainsborough	N	N	Y	N	N	N	Cottam 2, 3a and 3b are not visibile therefore no potential cumulative intervisibility.

T034	Pilham Lane, Aisby near Gainsborough	N	N	Y	N	N	N	Cottam 2, 3a and 3b are not visibile therefore no potential cumulative intervisibility.
T035	Access to Northfield Farm, Pilham					1		Already Scoped Out
T036	Pilham Lane, Pilham							Already Scoped Out
T036	Pilham Lane, Pilham							Already Scoped Out
Т037	Yawthorpe Lane, Willoughton	N	Y	Y	N	Y	N	Cottam 2, 3a and 3b are not visibile therefore no potential cumulative intervisibility.
T038	Field Farm Lane, Corringham	N	N	Y	N	Y	Y	Cottam 2, 3a and 3b are not visibile therefore no potential cumulative intervisibility.
T038	Field Farm Lane, Corringham	N	N	Y	N	Y	Y	Cottam 2, 3a and 3b are not visibile therefore no potential cumulative intervisibility.
T040	Access to Corringham Grange, Corringham	N	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T040 (Access to Corringham Grange, Corringham), the receptor is approximately 6.2 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.2 km away from the closest Tillbridge Solar site. However, dense vegetation associated with nearby fields and existing vegetation associated with the A631 limits views into the development sites. No views of cumulative developments - Scope Out.

Т040	Access to Corringham Grange, Corringham	N	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T040 (Access to Corringham Grange, Corringham), the receptor is approximately 6.2 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.2 km away from the closest Tillbridge Solar site. However, dense vegetation associated with nearby fields and existing vegetation associated with the A631 limits views into the development sites. No views of cumulative developments - Scope Out.
T040	Access to Corringham Grange, Corringham	N	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T040 (Access to Corringham Grange, Corringham), the receptor is approximately 6.2 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.2 km away from the closest Tillbridge Solar site. However, dense vegetation associated with nearby fields and existing vegetation associated with the A631 limits views into the development sites. No views of cumulative developments - Scope Out.
T041	Gainsborough Road, Willoughton							Already Scoped Out
T042	East Lane, Corringham							Already Scoped Out
T043	Mill Mere Road, Corringham							Already Scoped Out

T045	From East Lane to A631, Corringham	N	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T045 (From East Lane to A631, Corringham), the receptor is approximately 5.6 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 0.9 km away from the closest Tillbridge Solar site. However, built form associated with Corringham closes down views to the development and existing vegetation associated with A631 limits views into the development sites. No views of cumulative developments - Scope Out.
T045	From East Lane to A631, Corringham	N	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T045 (From East Lane to A631, Corringham), the receptor is approximately 5.6 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 0.9 km away from the closest Tillbridge Solar site. However, built form associated with Corringham closes down views to the development and existing vegetation associated with A631 limits views into the development sites. No views of cumulative developments - Scope Out.

				_	_			
		N	N	Y	N	Y	N	Though the cumulative developments cover a
								significant surface area and therefore have extensive
								zones of theoretical visibility, with the case of
								ground-mounted solar panels it should be noted
								that with effective screening and site-specific
								topgraphy the area of theoretical visibility could be
								zero. Specifically with receptor T045 (From East Lane
								to A631, Corringham), the receptor is approximately
								5.6 km to Gate Burton Energy Farm and therefore
								has no potential intervisibility. Similarly, the
								receptor is approximately 0.9 km away from the
T045	From East Lane to A631, Corringham							closest Tillbridge Solar site. However, built form
								associated with Corringham closes down views to
								the development and existing vegetation associated
								with A631 limits views into the development sites.
1								·
								No views of cumulative developments - Scope Out.
TOAC	Middle Chart Contacts as				-			Almost Control Out
T046	Middle Street, Corringham							Already Scoped Out
T048	Springthorpe Road, Corringham							Already Scoped Out
T048	Springthorpe Road, Corringham							Already Scoped Out
T049	Grange Lane, Springthorpe		+					Already Scoped Out
T049	Grange Lane, Springthorpe							Already Scoped Out
T051	School Lane, Springthorpe							Already Scoped Out
T053	Chapel Lane, Springthorpe							Already Scoped Out
T055	Unnamed Road, Springthorpe							Already Scoped Out
T056	Bratt Field Middle Road, Springthorpe							Already Scoped Out
		N	Y	Y	Y	Y	Υ	Cottam 1 is not visibile therefore no potential
T059	Northlands Road, Glentworth							cumulative intervisibility.
T063	Cow Lane, Upton							Already Scoped Out
		N	Y	Y	Y	Y	Y	Cottam 1 is not visibile therefore no potential
T064	Kexby Road, Glentworth							cumulative intervisibility.
		N	Y	Y	Υ	Y	Y	Cottam 1 is not visibile therefore no potential
TOC 4	Kouhu Bood Clonturanth							cumulative intervisibility.
T064	Kexby Road, Glentworth							January.
TOCC	Clautius with Board Worthy							Alexandra Carried Out
T066	Glentworth Road, Kexby		-			1		Already Scoped Out
T066	Glentworth Road, Kexby							Already Scoped Out

T072	Access to Fillingham Grange, Fillingham	N	Y	Y	N	Y	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T072 (Access to Fillingham Grange, Fillingham), the receptor is approximately 15.5 km to Field Farm, 6.2 km to West Burton and 5.9 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.8 km away from the closest Tillbridge Solar site. However, vegetation assoicated with nearby fields closes down views to the development. No views of cumulative developments - Scope Out.
T072	Access to Fillingham Grange, Fillingham	N	Y	Y	N	Y	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T072 (Access to Fillingham Grange, Fillingham), the receptor is approximately 15.5 km to Field Farm, 6.2 km to West Burton and 5.9 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.8 km away from the closest Tillbridge Solar site. However, vegetation assoicated with nearby fields closes down views to the development. No views of cumulative developments - Scope Out.

T072	Access to Fillingham Grange, Fillingham	N	Y	Y	N	Y	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T072 (Access to Fillingham Grange, Fillingham), the receptor is approximately 15.5 km to Field Farm, 6.2 km to West Burton and 5.9 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.8 km away from the closest Tillbridge Solar site. However, vegetation assoicated with nearby fields closes down views to the development. No views of cumulative developments - Scope Out.
Т074	Willingham Road, Fillingham	Y	Y	Y	N	Y	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T074 (Willingham Road, Fillingham), the receptor is approximately 13.2 km to Field Farm, 12.1 km to Bumble Bee Farm, 5.4 km to West Burton and 3.7 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.4 km away from the closest Tillbridge Solar site. However, vegetation associated with nearby fields closes down views to the development. No views of cumulative developments - Scope Out.

T074	Willingham Road, Fillingham	Y	Y	Y	N	Y	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T074 (Willingham Road, Fillingham), the receptor is approximately 13.2 km to Field Farm, 12.1 km to Bumble Bee Farm, 5.4 km to West Burton and 3.7 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.4 km away from the closest Tillbridge Solar site. However, vegetation associated with nearby fields closes down views to the development. No views of cumulative developments - Scope Out.
T074	Willingham Road, Fillingham	Y	Y	Y	N	Y	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T074 (Willingham Road, Fillingham), the receptor is approximately 13.2 km to Field Farm, 12.1 km to Bumble Bee Farm, 5.4 km to West Burton and 3.7 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.4 km away from the closest Tillbridge Solar site. However, vegetation associated with nearby fields closes down views to the development. No views of cumulative developments - Scope Out.

T074	Willingham Road, Fillingham	Y	Y	Y	N	Y	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T074 (Willingham Road, Fillingham), the receptor is approximately 13.2 km to Field Farm, 12.1 km to Bumble Bee Farm, 5.4 km to West Burton and 3.7 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.4 km away from the closest Tillbridge Solar site. However, vegetation associated with nearby fields closes down views to the development. No views of cumulative developments - Scope Out.
T074	Willingham Road, Fillingham	Y	Y	Y	N	Y	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T074 (Willingham Road, Fillingham), the receptor is approximately 13.2 km to Field Farm, 12.1 km to Bumble Bee Farm, 5.4 km to West Burton and 3.7 km to Gate Burton Energy Farm and therefore has no potential intervisibility. Similarly, the receptor is approximately 1.4 km away from the closest Tillbridge Solar site. However, vegetation associated with nearby fields closes down views to the development. No views of cumulative developments - Scope Out.
T075	Fillingham Lane, Willingham	N	N	Y	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T075	Fillingham Lane, Willingham	N	N	Y	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T075	Fillingham Lane, Willingham	N	N	Y	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
Т077	Unnamed Road, Ingham	Y	Y	Y	Y	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.

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Т078	South Lane, Willingham	N	N	Υ	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T078	South Lane, Willingham	N	N	Y	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T078	South Lane, Willingham	N	N	Y	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T078	South Lane, Willingham	N	N	Υ	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T079	High Street, Willingham							Already Scoped Out
T082	Grange Lane, Willingham by Stow							Already Scoped Out
1002	Grange Lane, winnigham by Stow	N	N	٧	N	Y	N	Cottam 1 is not visibile therefore no potential
T083	Cot Garth Lane					·		cumulative intervisibility.
T083	Cot Garth Lane	N	N	Υ	N	Y	N	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T084	Unnamed Road, Coates by Stow	N	Y	Y	N	Y	N	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T084	Unnamed Road, Coates by Stow	N	Y	Υ	N	Y	N	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T084	Unnamed Road, Coates by Stow	N	Y	Υ	N	Y	N	Cottam 1 is not visibile therefore no potential
		N	Y	Υ	N	Y	N	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential
T084	Unnamed Road, Coates by Stow		'	•	"	'	"	cumulative intervisibility.
		N	Y	٧	N	Y	N I	Cottam 1 is not visibile therefore no potential
T084	Unnamed Road, Coates by Stow		'	•		'	, and the second	cumulative intervisibility.
T085	Stone Pit Lane, Willingham by Stow	N	N	Υ	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T085	Stone Pit Lane, Willingham by Stow	N	N	Υ	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T085	Stone Pit Lane, Willingham by Stow	N	N	Υ	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T086	Short Lane, Ingham		+					Already Scoped Out
T087			+					
T087	Stow Road, Williams							Already Scoped Out
	Stow Road, Williams		+			<u> </u>		Already Scoped Out
T087	Stow Road, Willingham		1					Already Scoped Out
T091	Long Lane, Ingham							Already Scoped Out
T091	Long Lane, Ingham							Already Scoped Out
T092	Marton Road, Willingham							Already Scoped Out
T092	Marton Road, Willingham							Already Scoped Out
T094	Track between South Lane and Coates Lane, Willingham	N	N	Υ	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T094	Track between South Lane and Coates Lane, Willingham	N	N	Y	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T094	Track between South Lane and Coates Lane, Willingham	N	N	Υ	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T094	Track between South Lane and Coates Lane, Willingham	N	N	Y	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
Т096	Coates Lane, Coates by Stow	N	N	Υ	N	Y	Y	Cottam 1 is not visibile therefore no potential
T096	Coates Lane, Coates by Stow	N	N	Υ	N	Y	Y	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential
T096	Coates Lane, Coates by Stow	N	N	Y	N	Y	Y	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential
1000	coates Lane, coates by Stow							cumulative intervisibility.
Т096	Coates Lane, Coates by Stow	N	N	Y	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T097	Normanby Road, Normanby by Stow	Y	N	Υ	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.

Т097	Normanby Road, Normanby by Stow	Y	N	Y	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
Т097	Normanby Road, Normanby by Stow	Y	N	Y	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T098	Unnamed Road, Stow							Already Scoped Out
T098	Unnamed Road, Stow							Already Scoped Out
T098	Coates Lane, Stow	N N	N	Y	N	Y	Y	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T099 (Coates Lane, Stow), the receptor is approximately 4.13 km to Tillbridge Solar site and therefore has no potential intervisibility. Similarly, the receptor is approximately 2.10 km away from West Burton however, built form associated with Stow closes down views to the development and existing vegetation associated with Normnaby Road, Church Road, Stow Park Road and Till Bridge Lane limits views into the development sites. The site is also approximately 1.19 km from Gate Burton Energy Farm however, vegetation associated with nearby fields and tributaries as well as existing vegetation associated with Marton Road closes down views to the development. No views of cumulative developments - Scope Out.

		1	·	1	1			
		N	N	Y	N	Y	Y	Though the cumulative developments cover a
								significant surface area and therefore have extensive
								zones of theoretical visibility, with the case of
								ground-mounted solar panels it should be noted
								that with effective screening and site-specific
								topgraphy the area of theoretical visibility could be
								zero. Specifically with receptor T099 (Coates Lane,
								Stow), the receptor is approximately 4.13 km to
								Tillbridge Solar site and therefore has no potential
								intervisibility. Similarly, the receptor is
								approximately 2.10 km away from West Burton
								however, built form associated with Stow closes
								down views to the development and existing
								vegetation associated with Normnaby Road, Church
T099	Coates Lane, Stow							Road, Stow Park Road and Till Bridge Lane limits
								views into the development sites. The site is also
								approximately 1.19 km from Gate Burton Energy
								Farm however, vegetation associated with nearby
								fields and tributaries as well as existing vegetation
								assoicated with Marton Road closes down views to
								the development No views of cumulative
								developments - Scope Out.

		1	·	1	1			
		N	N	Y	N	Y	Y	Though the cumulative developments cover a
								significant surface area and therefore have extensive
								zones of theoretical visibility, with the case of
								ground-mounted solar panels it should be noted
								that with effective screening and site-specific
								topgraphy the area of theoretical visibility could be
								zero. Specifically with receptor T099 (Coates Lane,
								Stow), the receptor is approximately 4.13 km to
								Tillbridge Solar site and therefore has no potential
								intervisibility. Similarly, the receptor is
								approximately 2.10 km away from West Burton
								however, built form associated with Stow closes
								down views to the development and existing
								vegetation associated with Normnaby Road, Church
T099	Coates Lane, Stow							Road, Stow Park Road and Till Bridge Lane limits
								views into the development sites. The site is also
								approximately 1.19 km from Gate Burton Energy
								Farm however, vegetation associated with nearby
								fields and tributaries as well as existing vegetation
								assoicated with Marton Road closes down views to
								the development No views of cumulative
								developments - Scope Out.

		N	N	Y	N	Y	Y	Though the cumulative developments cover a
								significant surface area and therefore have extensive
								zones of theoretical visibility, with the case of
								ground-mounted solar panels it should be noted
								that with effective screening and site-specific
								topgraphy the area of theoretical visibility could be
								zero. Specifically with receptor T099 (Coates Lane,
								Stow), the receptor is approximately 4.13 km to
								Tillbridge Solar site and therefore has no potential
								intervisibility. Similarly, the receptor is
								approximately 2.10 km away from West Burton
								however, built form associated with Stow closes
								down views to the development and existing
								vegetation associated with Normnaby Road, Church
T099	Coates Lane, Stow							Road, Stow Park Road and Till Bridge Lane limits
								views into the development sites. The site is also
								approximately 1.19 km from Gate Burton Energy
								Farm however, vegetation associated with nearby
				1				fields and tributaries as well as existing vegetation
				1				
								assoicated with Marton Road closes down views to
								the development No views of cumulative
								developments - Scope Out.
T100	Willingham Road, Marton							Already Scoped Out
T100	Willingham Road, Marton							Already Scoped Out
T104	Unnamed Road, Stow							Already Scoped Out
T104	Unnamed Road, Stow							Already Scoped Out
T104	Unnamed Road, Stow						1	Already Scoped Out
		Y	Y	V V	V	N	N	Cottam 1 is not visibile therefore no potential
T105	Stow Lane, Ingham	'	'	'	'	"	"	cumulative intervisibility.
		V	- V	Y	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	N.	<b>1</b>	Cottam 1 is not visibile therefore no potential
T105	Stow Lane, Ingham	Y	Y	Y	Y	N	N	· '
						-	-	cumulative intervisibility.
T106	Normanby Road, Stow					-	1	Already Scoped Out
T106	Normanby Road, Stow						1 1	Already Scoped Out
T106	Normanby Road, Stow							Already Scoped Out
T107		l N	N	l v	N	Ιγ	Y	Cottam 1 is not visibile therefore no potential
	Ingham Poad Stow	l IN	'N	1 '	'\	1 '	1 ' 1	Cottain 1 is not visible therefore no potential
1.107	Ingham Road, Stow	IN IN	l N	'	l IV	·		cumulative intervisibility.
		N	N	Y	N	Y	Y	
T107	Ingham Road, Stow Ingham Road, Stow			'		Y	·	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential
T107	Ingham Road, Stow	N	N	'	N		Y	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.
				Y		Y	·	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential
T107	Ingham Road, Stow	N N	N N	Y	N N	Y	Y	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T107	Ingham Road, Stow	N	N	Y	N		Y	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential
T107	Ingham Road, Stow Ingham Road, Stow	N N N	N N N	Y	N N N	Y	Y	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T107	Ingham Road, Stow Ingham Road, Stow	N N	N N	Y	N N	Y	Y	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T107 T107 T107 T107	Ingham Road, Stow Ingham Road, Stow Ingham Road, Stow Ingham Road, Stow	N N N	N N N	Y	N N N	Y	Y	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.
T107 T107 T107 T107 T107	Ingham Road, Stow Ingham Road, Stow Ingham Road, Stow Ingham Road, Stow Church Road, Stow	N N N	N N N	Y	N N N	Y	Y	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Already Scoped Out
T107 T107 T107 T107 T108 T108	Ingham Road, Stow Ingham Road, Stow Ingham Road, Stow Ingham Road, Stow Church Road, Stow Church Road, Stow	N N N	N N N	Y	N N N	Y	Y	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Already Scoped Out  Already Scoped Out
T107 T107 T107 T107 T108 T108 T108 T109	Ingham Road, Stow Ingham Road, Stow Ingham Road, Stow Ingham Road, Stow Church Road, Stow Church Road, Stow Unnamed Road, Stow	N N N	N N N	Y	N N N	Y	Y	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Already Scoped Out  Already Scoped Out
T107 T107 T107 T107 T108 T108	Ingham Road, Stow Ingham Road, Stow Ingham Road, Stow Ingham Road, Stow Church Road, Stow Church Road, Stow	N N N	N N N	Y	N N N	Y	Y	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Already Scoped Out  Already Scoped Out
T107 T107 T107 T107 T108 T108 T108 T109	Ingham Road, Stow Ingham Road, Stow Ingham Road, Stow Ingham Road, Stow Church Road, Stow Church Road, Stow Unnamed Road, Stow	N N N	N N N	Y	N N N	Y	Y	cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Cottam 1 is not visibile therefore no potential cumulative intervisibility.  Already Scoped Out  Already Scoped Out

T110	Disability and Laure Communications	<u> </u>	1	I	1	1	<del> </del>	Almanda Casarad Out
T110	Blackthorn Lane, Cammeringham				<u> </u>		<del>                                     </del>	Already Scoped Out
T112	School Lane, Stow							Already Scoped Out
T112	School Lane, Stow				1	-		Already Scoped Out
T113	Furze Hill, Stow				1			Already Scoped Out
T113	Furze Hill, Stow				1			Already Scoped Out
T113	Furze Hill, Stow				-			Already Scoped Out
T113	Furze Hill, Stow							Already Scoped Out
T114	Church Lane, Stow				-			Already Scoped Out
T114	Church Lane, Stow							Already Scoped Out
T116	Sturton Road, Stow							Already Scoped Out
T116	Sturton Road, Stow				1			Already Scoped Out
T117	Unnamed Road, Stow							Already Scoped Out
T118	Stow Park Road, Stow							Already Scoped Out
T118	Stow Park Road, Stow							Already Scoped Out
T119	Fleets Lane, Sturton by Stow							Already Scoped Out
T119	Fleets Lane, Sturton by Stow							Already Scoped Out
T119	Fleets Lane, Sturton by Stow							Already Scoped Out
T119	Fleets Lane, Sturton by Stow							Already Scoped Out
T120	Unnamed Road, Stow							Already Scoped Out
T120	Unnamed Road, Stow							Already Scoped Out
T121	Unnamed Road, Brattleby							Already Scoped Out
T121	Unnamed Road, Brattleby							Already Scoped Out
T122	Unnamed Road, Stow							significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T122 (Unnamed Road, Stow), the receptor is approximately 5.1 km to Tillbridge Solar site, 4.6 km from Gate Burton Energy Park and therefore has no potential intervisibility. Similarly, the receptor is approximately 2.1 km away from the closest West Burton site. However, vegetation associated with nearby fields and tributaries as well as existing vegetation associated with Thorpe Le Fallows and Tillbridge Lane closes down views to the development. No views of cumulative developments - Scope Out.
T122	Unnamed Road, Stow							Already Scoped Out
T123	Stow Road, Sturton by Stow				1			Already Scoped Out
T125	Thorpe Lane, Brattleby							Already Scoped Out
T125	Thorpe Lane, Brattleby	N	Y	Y	N	Y	Y	Cottam 1 is not visibile therefore no potential cumulative intervisibility.

		N	N	Y	N	Y	Υ		ough the cumulative developments cover a
								-	nificant surface area and therefore have extensive
									nes of theoretical visibility, with the case of
								"	ound-mounted solar panels it should be noted
									at with effective screening and site-specific
									pgraphy the area of theoretical visibility could be
									ro. Specifically with receptor T127 (Thorpe Lane,
									orpe in the Fallows), the receptor is
									proximately 6.1 km from Tillbridge Solar site, 3.9
									n from Gate Burton Energy Farm and therefore has
									potential intervisibility. Similarly, the receptor is
T127	Thorpe Lane, Thorpe in the Fallows								proximately 1.5 km away from the closest West
									orton however, vegetation assoicated with nearby
									elds and tributaries as well as existing vegetation
									sociated with Tillbridge Lane closes down views to
									e development. No views of cumulative
								de	velopments - Scope Out.
T127	Thorpe Lane, Thorpe in the Fallows								Already Scoped Out
T127	Thorpe Lane, Thorpe in the Fallows								Already Scoped Out
T128	Marton Road, Sturton by Stow (A1500)								Already Scoped Out
T129	Fleets Road, Sturton by Stow								Already Scoped Out
T129	Fleets Road, Sturton by Stow								Already Scoped Out
T129	Fleets Road, Sturton by Stow								Already Scoped Out
T131	Thorpe Lane, Sturton by Stow								Already Scoped Out
T131	Thorpe Lane, Sturton by Stow								Already Scoped Out
T132	Lowfields, Aisthorpe								Already Scoped Out
T133	Tillbridge Road, Sturton by Stow (A1500)								Already Scoped Out
T134	Lincoln Lane, Thorpe in the Fallows								Already Scoped Out
T135	Tillbridge Lane, Sturton by Stow (A1500)								Already Scoped Out
T138	Main Street, Bransby								Already Scoped Out
T139	Tillbridge Lane, Scampton (A1500)								Already Scoped Out
T141	Access track to Manor Farm								Already Scoped Out
T142	Tillbridge Lane, Stow								Already Scoped Out
T142	Tillbridge Lane, Stow								Already Scoped Out
T143	Stow Park Road, Stow Park								Already Scoped Out
T143	Stow Park Road, Stow Park								Already Scoped Out
T144	Stow Park Road, Marton								Already Scoped Out
T144	Stow Park Road, Marton								Already Scoped Out
T144	Stow Park Road, Marton								Already Scoped Out
T145	Littleborough Lane, Marton								Already Scoped Out
T145	Littleborough Lane, Marton								Already Scoped Out
T146	High Street, Marton								Already Scoped Out
T146	High Street, Marton								Already Scoped Out
T146	High Street, Marton								Already Scoped Out
T147	Trent Port Road, Marton								Already Scoped Out
T147	Trent Port Road, Marton								Already Scoped Out
T148	Lea Road, Brampton								Already Scoped Out
<b></b>				I -	1	T	1		Almandu Canmad Out
T148	Lea Road, Brampton								Already Scoped Out
T149 T150	Lea Road, Brampton Coates Road, Coates								Already Scoped Out  Already Scoped Out

T151	Town Street							Already Scoped Out
T152	Marsh Lane, Cottam							Already Scoped Out
T153	Broad Lane, Cottam							Already Scoped Out
T154	Overcoat Lane, Cottam							Already Scoped Out
T155	Wells Lane, Cottam							Already Scoped Out
T156	Outgang Road, Cottam							Already Scoped Out
T157	Outgang Lane, Cottam							Already Scoped Out
T157	Outgang Lane, Cottam							Already Scoped Out
T158	Cow Pasture Lane, South Leverton							Already Scoped Out
T159	Westbrecks Lane, South Leverton							Already Scoped Out
T159	Westbrecks Lane, South Leverton							Already Scoped Out
T160	Torksey Ferry Road. Rampton							Already Scoped Out
T161	Nightleys Road, Rampton							Already Scoped Out
T162	Shortleys Road, Rampton							Already Scoped Out
T162	Pailway Phyton	N	N	Y	N	Y	N	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor T163 (Railway, Blyton), the receptor is approximately 8.3 km to Gate Burton Energy Farm, 3.5 km to Tillbridge Solar site and therefore has no potential intervisibility. No views of cumulative developments - Scope Out.
T163	Railway, Blyton		-	-	-			
T163	Railway, Blyton		-		1			Already Scoped Out
T163	Railway, Blyton							Already Scoped Out
T163	Railway, Blyton					-		Already Scoped Out
T163	Railway, Blyton					1		Already Scoped Out
T164	Railway, Stow Park Road							Already Scoped Out
T164	Railway, Stow Park Road							Already Scoped Out
T165	Railway, Cottam Power Station							Already Scoped Out



# Transport Receptor - T016 / B1205 Kirton Road to C228 Monson Road, Northorpe near Scotter

# **Baseline Context:**

This section of Kirton Road, passes from Monson Road, Northorpe towards the settlement of Blyton in an east west alignment. The road then takes a wide 'dog-leg' turn at Blenheim Farm and heads south towards Blyton Level Crossing and skirts the eastern edge of the Site/Sites. The road is mainly open along its length due to the absence of bordering woodland blocks and verge side hedgerows.

Looking directly west and north over the Cottam 3a Site and also southwest towards the Cottam 3b Site/Sites with the Cottam 2b Site beyond.

Distance to Cottam Sites: 5m to Cottam 3a Site.

Nearest Viewpoint/s: VP59, VP60 and VP61

# **Description of Route:**

The first section of the route (as far as Gainsborough Road Covert) heads from the junction with Monson Road and passes through open countryside comprising large-scale arable fields divided by hedgerows with individual and groups of trees. There are low hedgerows to the south side of Kirton Road but with absence of hedgerows to the north side and the views are wide reaching both north and south from each side of the road. The central section of the route (as far as Blenheim Farm) continues through open countryside and is similar to the first section but with more verge side trees and woodland blocks between the agricultural fields, and so far-reaching views are more curtailed. The final section of the route (as far as Bonsdale Lane) comprises low hedgerows and tree cover to the western side of the road with and open aspects to the east and no hedgerows.

There is a marked contrast between the first section of the route and the final since the hedgerow trees are stronger and there are more tree clumps in the hedgerows. This strong tree cover gives a more enclosed feeling to the final section of the route, especially given that the road is winding, with notable tussocky grass verges that adds some height and additional structure.

The route is influenced by the open nature of the location and the presence of the Blyton Park Driving Centre (large-scale, shed like building) is a detractor in the final section of the route along with the wind turbine on the 3a Site/Sites. The hanger and other masts and poles are also prominent from this section of the route, but the tree, scrub and hedgerow cover in the foreground helps to mitigate their presence. The clusters of deciduous woodland to the northeast of the Site/Sites is also an appealing feature in the context of the route and helps mitigate its presence in the landscape. There are extended views towards the east and the west, which is the overriding feature along Kirton Road (at this section), and the road continues to be defined by strong hedgerows that are low-cut.

Overall, this route is subject to medium levels of traffic, but offers some interesting features locally along its length, including invigorating and clear open views across the landscape both north and south and east and west including views towards the distant landscape of Laughton Woods and Laughton Common (due to the change in direction of the route). The existing vegetation bordering the mainline railway is also the appealing feature of the route (picked out by the overhead gantrys). This is an attractive route due to the pleasant outlook in all directions and this takes account of the balance and harmony of this arable landscape made more appealing by the individual tree cover and groups of trees in close proximity to the route.

**Sensitivity:** *Medium* 

# **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.



Receptor – T016 / B1205 Kirton Road to C228 Monson Road, Northorpe near Scotter									
Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change						
The first and middle sections of the route would not be significantly affected, but users of the final section of the route would experience changes, particularly at the location where the route passes directly adjacent to the boundary of the Cottam 3a Site. These changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Kirton Road. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the tree groups bordering the route would provide some screening such that these activities would be confined to a narrower section of the view where the route passes directly adjacent to the boundary.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a narrow proportion of the view and appear as a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and east of Kirton Road.  Construction Access Transport receptor will be partially affected by the two proposed construction accesses on	The foreground of the views from the route at this final section would change from a large agricultural field to an area of panels, but only for a narrow part. The changes would be experienced within the context of the Blyton Park Racing Centre that would add minor cumulative changes to the views. Further agricultural fields beyond would be screened from route by the panels and the distant backdrop of Laughton Wood may be lost. The setting of Kirton Road as it winds towards Northorpe with groups and individual trees along its verges would not be directly affected by the new panels. The similar small group of trees divided by Kirton Lane as it makes a small turn would however be affected by the presence of the new panels. The vertical elements in the view, including power lines, the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables would add minor cumulative changes to the view.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15), refer to Viewpoints VP59, VP60 and VP61.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic noise and vibration from decommissioning activities, dust generation and site runoff.						



Magnitude	Medium	Medium	Medium	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term
Significance of Effect	Moderate <b>Significant</b>	Moderate <b>Significant</b>	Moderate <b>Significant</b>	Minor Not Significant

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	in-combination effects [cumulative sites]	Cumulative Effects [Cumulative Developments]
	Sequential Frequent Visibility	Fabric of the Landscape
	The first and middle sections of the route would not be significantly affected, but users of the final section of the route would experience changes, particularly at the location where the route passes directly adjacent to the boundary of the Cottam 3a Site	There would not be the removal of or changes in individual elements or features of the landscape within the character area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area.
	During the construction stage (the works) and during the operation stage (the panel areas) the effects would appear consistently and with short time lapses between instances. Although there is a slow speed of travel for vehicle users as thus is a slight bend in the road with limited forward visibility. There is an open boundary to the west of the route and so the distances between the areas of visibility would be frequent with no gaps between.	Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
	The foreground of the views from the route would change from the agricultural field (to one side of the route at the final section of the route) to reveal both the works during the construction stage and an area of panels during the operation stage, but they would be set back from the route. The changes would be experienced in close proximity and within the context of the surrounding arable fields with a prevailing character of openness but the distinct presence of other development, man-made features, and large scale 'shed-like' buildings is also evident.	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
	The works and the panel areas are in close proximity to the receptor and are clearly visible together in views from selected viewpoints VP59, VP60 and VP61 and also from areas between these viewpoints as the route takes a course from Kirton in Lindsey in the west.  Sequential Occasional Visibility The panel areas may appear with longer time lapses between appearances because the observer may be moving more slowly at a slight bend in the road but there are larger distances between the available	Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
Magnitude	viewpoints along the route.  Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Significant Operation (Year 15): Low Decommissioning: Low	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Significant Operation (Year 15): Low Decommissioning: Low
Type of Effect	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant



[Reference: EN010133/APP/C6.3.8.3.4.2.2\_A] January 2023

# Transport Receptor - T019 / Kirton Road, Blyton

### **Baseline Context:**

This section of Kirton Road, passes between the settlement of Blyton to the junction with Bonsdale Lane in a west east alignment. The road then takes a wide 'right-angled' turn to head north towards Blenheim Farm passing the eastern edge of the Site/Sites. The road is mainly open along its length due to the absence of bordering woodland blocks and the low-cut verge side hedgerows.

Looking north directly over the Cottam 3a Site and south towards the Cottam 3b Site.

**Distance to Cottam Sites**: 0m to Cottam 3a

Nearest Viewpoint/s: VP59, VP60 and VP62

# **Description of Route:**

The first section of the route (as far as The Fields Farm) passes through a series of arable fields to each side dived by low hedgerows with a scattering of individual and groups of trees. The central section (as far as the entrance to the Blyton Park Driving Centre) continues through the arable fields, but there are detractors including overhead electricity pylons, telegraph poles and conifer shelterbelts. The presence of farmsteads is also more apparent in this middle section and the hedgerows are low, so the views are far-reaching, particularly towards the north. The third section of the route (as far as Bonsdale Lane) comprises similar arable fields, but with more tree cover and small woodlands with less of an open aspect.

There is a marked contrast between the first section and middle of the route since there are more settlement influences and detractors and the final section supports taller hedgerows with trees and tree clumps within the hedgerows. This strong tree cover gives a more enclosed feeling to the final section of the route.

The route is influenced by the open nature of the location and the visual relationship between the heart of the settlement at the war memorial and this gateway to the settlement.

There are extended views and although Kirton Road is defined by a good hedgerow they are low-cut. The hedgerow trees are strong, and this gives some visual interest to the route (given that it is a long straight road with no footways and only narrow grass verges).

Overall, this route is subject to medium levels of traffic, but offers some interesting features locally along its length, including open views across the landscape both north and south and also views to the heart of the settlement. The existing vegetation bordering the mainline railway is also the appealing feature of the route (picked out by the overhead gantrys). This is an attractive route due to the pleasant outlook in two directions and this takes account of the arable landscape made more appealing by the individual tree cover and groups of trees in close proximity to the edge of the settlement. The small woodland block to the west boundary of the Site/Sites is prominent from this route on the horizon and the nearby conifer shelter belt is also prominent.

**Sensitivity:** *Medium* 

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.





# Transport Receptor - T019 / Kirton Road, Blyton

### Mitigation **Operation Magnitude of Change Decommissioning Magnitude Construction Magnitude of Change** (Operation Magnitude of Change at (Year 1) of Change **Year 15)** The first and middle sections of the route would be significantly The foreground of the views from the route at Secondary mitigation such as planting, and grass A similar process to that of construction stage, but with the affected, particularly at the location where the route passes this first and middle section would change seeding would be taken into account at this stage, Scheme being no longer operational. This is an assessment directly adjacent to the boundary of the Site/Sites. The users of from a large agricultural field to an area of but the Scheme would introduce panels to the of the Site in winter but assumes retention of existing the final section of the route would experience less change due panels, and across an extensive proportion of north side of Kirton Road and this would result in vegetation and builds upon the proposed primary and to the intervening hedgerows and field parcels that provide the view. The changes would be experienced a noticeable deterioration when travelling along secondary mitigation that had been established as the separation and intermediary screening. These changes would within the context of the settlement edge the road. For details on the planting mitigation for future baseline. Effects are those arising from activities for include the construction activities during site preparation / influences that would add minor cumulative the operation magnitude of change (Year 15), the duration of the decommissioning to include site traffic, enabling works, construction, and commissioning with effects changes to the views. Further agricultural please refer to Viewpoints VP59, VP60 and VP62. noise and vibration from decommissioning activities, dust such as construction traffic, noise and vibration from fields beyond would be screened from route generation and site runoff. construction activities, dust generation, site runoff, mud on by the panels and the distant backdrop of roads, and the visual intrusion of plant and machinery on site. Laughton Wood may be lost. The vertical At the early stages of the construction stage, ground, and elements in the view, including power lines, lower-level activities such as the construction of the solar panel the wind turbine at the Blyton Park Racing areas and associated infrastructure and inverters would be Centre, the mainline railway infrastructure, evident over the foreground hedgerow bordering Kirton Road. telegraph poles and associated cables would During the latter part of the construction stage, views would also add minor cumulative changes to the become available of the elevated activities above the view. hedgerow. Due to the absence of tree cover, the route would not benefit from screening such that these activities would be experienced over an extensive proportion of the view where the route passes directly adjacent to the boundary. Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows. These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south of Kirton Road. **Construction Access** Transport receptor will be affected by the two proposed construction access into Cottam 3a Site. Cable Route Corridor Transport receptor is within the 500m cable route corridor study area. Substation/s Transport receptor is within the within 2km study area for Cottam 3a and 3b substations. Medium Magnitude Medium High Low



of Effect

Operation (Year 15): Minor **Not Significant** 

Decommissioning: Minor **Not Significant** 

SOLAR PROJECT					
Type of Effect	Adverse & Short Term	Adverse & Long Term	А	Adverse & Long Term	Neutral & Short Term
Significance of Effect	Moderate <b>Significant</b>	Moderate- Major <b>Significant</b>	N	Moderate <b>Significant</b>	Minor Not Significant
Transport Receptor – T019 / Kirton Road, Blyton					
	Sequential Frequent Visibility  The first and middle sections of the route would be significantly affected, particularly at the location where the route passes directly adjacent to the boundary of the Site/Sites. The users of the final section of the route would experience less change due to the intervening hedgerows and field parcels that provide separation and intermediary screening.  During the construction stage (the works) and during the operation stage (the panel areas) the effects would appear consistently and with short time lapses between instances. There is a fast speed of travel for road users (although walkers and pedestrians may be travelling at a slow speed). However, there is a low hedgerow to the west boundary of the route and so the distances between the areas of visibility would be frequent with no gaps between.  The foreground of the views from the route would change from the agricultural fields as part of the airfield site (to one side of the route only) to reveal both the works during the construction stage and an area of panels during the operation stage, but they would be set back from the route. The changes would be experienced in close proximity and within the context of the surrounding arable fields with a prevailing character of openness but there is a distinct presence of other development and man-made features and large scale 'shed-like' buildings associated with the Blyton Park Driving Centre.  The works and the panel areas are in close proximity to the receptor and are clearly visible together in		Cumulative Effects [Cumulative Developments]  Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area.		
			Refer to <b>F</b> cumulativ	ve developments would not be experienced across	ith the Cottam 3a and 3b Sites, cumulative visibility with the sthe majority of the 5km study area. This is due to the cover between the Site/Sites. The intervening settlements and hese Site/Sites.
			There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]  Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east		
	viewpoints as the route takes a course from the settlement of Bly Lindsey to the east.  Sequential Occasional Visibility The panel areas may appear with shorter time lapses between a be moving more quickly but there are closer distances between route.	ppearances because the observer may	ability to a		These relevant characteristics of the landscape have some ects. The cumulative visibility for the Cottam 3b Site would not coded Vales Character Area 4a.
Magnitude	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Sign Operation (Year 15): Low Decommissioning: Low	gnificant	Operation Operation Decommi	n (Year 1): Low n (Year 1): <b>with only</b> Embedded Mitigation: Low <b>N</b> n (Year 15): Low issioning: Low	ot Significant
Type of Effect	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & L Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term	ong Term	Operation Operation Operation	tion: Adverse & Short Term n (Year 1): Adverse & Long Term n (Year 1): <b>with only</b> Embedded Mitigation: Advers n (Year 15): Neutral & Long Term issioning: Neutral & Short Term	se & Long Term
Significance	Construction: Minor <b>Not Significant</b> Operation (Year 1): Minor <b>Not Significant</b> Operation (Year 1): with only Embedded Mitigation: Minor <b>Not S</b>	Significant	Construct Operation	tion: Minor <b>Not Significant</b> n (Year 1): Minor <b>Not Significant</b> n (Year 1): <b>with only</b> Embedded Mitigation: Minor	Not Significant

Operation (Year 15): Minor **Not Significant** 

Decommissioning: Minor **Not Significant** 



[Reference: EN010133/APP/C6.3.8.3.4.2.3] January 2023

# Transport Receptor - T021 / Bonsdale Lane, Blyton

### **Baseline Context:**

This section of Bonsdale Lane is located to the east of the settlement of Blyton where the lane extends from Pilham Lane to the north of Bonsdale Farm to meet with Kirton Road to the north of the mainline railway. The lane takes a north south alignment and is open along its western edge where its forms an adjacent boundary with Cottam 3b Site.

Looking directly west over the Cottam 3b Site and northwest towards the Cottam 3a Site.

Distance to Cottam Sites: 2m to Cottam 3b.

**Nearest Viewpoint/s:** VP57, VP58, VP59 and VP61.

# **Description of Route:**

This section of the route (commencing from the junction with public footpath Pilh/20/1) passes through open countryside and to the immediate east is Bonsdale Farm with an associated shelterbelt. There is a low-cut hedgerow to the west side of Bonsdale Lane with extended views towards Blyton on the far horizon shrouded in tree cover and set in the context of Laughton Woods. This section of the route extends as far as the Blyton Level Crossing and comprises large-scale arable fields to each side that are divided by hedgerows but lacking in individual trees or groups of trees. There is an absence of tree cover and where the views are available, they are wide reaching both east to west from each side of the road.

There is a marked contrast along Bonsdale Lane, which is relatively more enclosed and set in the context of the shelterbelt and large-scale agricultural buildings at the section to the south of the railway line near to Bonsdale Farm. The route is influenced by the open and exposed nature of the location, but the shelterbelt at Bonsdale Farm gives a comfortable and pleasant feeling and shelter to the east. There are extended views towards the south but the existing vegetation bordering the mainline railway and the dense shelterbelt vegetation within the field systems to the north of the railway lines curtails visibility in this direction. This route offers a pleasant journey with some interesting features locally, but with more invigorating views out towards the surrounding landscape, comprising both eastward and westward views.

Overall, this route is subject to some passing traffic due to it being a local lane passing north south serving residential properties and farmsteads. The lane offers a transition of features ranging from enclosed parts in the south to clear open views across the landscape from east to west. This is an ordinary route that takes account of the open arable landscape in close proximity to the receptor. Overall, this route offers a journey for road users and walkers with some features of interest.

**Sensitivity:** *Medium* 

# **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.



Environmental Statement Lar Appendix 8.3.4.2: Tran  [Reference: EN010]				
Transport	Receptor - T021 / Bonsdale Lane, Blyton  Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissio of Change
	This section of the route would be significantly affected, and users would experience changes, particularly at the location where the route passes directly adjacent to the boundary of the Cottam 3b Site. These changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel	The foreground of the views from the route at this second section would change from a large agricultural field to an area of panels, but only to the western side of the route. The changes would be experienced within the context of the wider intensive arable landscape that is open with very few features. Further agricultural fields beyond would be screened from route by the panels and the distant backdrop of	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15) refer to Viewpoints VP57, VP58, VP59 and VP61.	A similar process of Scheme being no of the Site in winto vegetation and busecondary mitigat future baseline. Ethe duration of the noise and vibration generation and site

lines, the wind turbine at the Blyton Park

Racing Centre, the mainline railway

infrastructure, telegraph poles and associated cables would add minor

cumulative changes to the view.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering

Bonsdale Lane. During the latter part of the construction stage,

views would become available of the elevated activities above the

hedgerow, since the tree lack of tree groups bordering the route

would allow open views such that these activities would be evident in a wide section of the view where the route passes directly

These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the east of Blyton Lane.

Transport receptor will not be affected by the proposed construction access for Cottam 3a or 3b Sites.

Transport receptor is outside of the 500m cable route corridor. Substation/s

3b substations.

Laughton Wood may be lost. The vertical elements in the view, including power

ioning Magnitude

ss to that of construction stage, but with the no longer operational. This is an assessment inter but assumes retention of existing builds upon the proposed primary and gation that had been established as the Effects are those arising from activities for f the decommissioning to include site traffic, ation from decommissioning activities, dust site runoff.

# **Construction Access**

adjacent to the boundary.

# Cable Route Corridor

Transport receptor is within the 2km study area of Cottam 3a and

Magnitude Type of

Effect

Medium

Adverse & Short Term

High

Adverse & Long Term

Medium

Low

Adverse & Long Term

Neutral & Short Term



Significance of Effect

Moderate Significant

Moderate Significant

Moderate Significant

Moderate Significant

Moderate Significant

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	Sequential Frequent Visibility  This section of the route would be significantly affected, and users would experience significant changes, particularly at the location where the route passes directly adjacent to the boundary of the Site/Sites.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	During the construction stage (the works) and during the operation stage (the panel areas) the effects would appear consistently and with short time lapses between instances. There is a slow speed of travel for walkers (although road users and farm vehicles may be travelling at speed) and there is a low boundary to the west boundary of the route and so the distances between the areas of visibility would be frequent with no gaps between.	There would be the introduction of new elements and features comprising the solar panel areas and the substation area.  Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
	The foreground of the views from the route would change from the agricultural fields (to one side of the route only) to reveal both the works during the construction stage and an area of panels during the operation stage, but they would be set back from the route. The changes would be experienced in close proximity and within the context of the surrounding arable fields with a prevailing character of openness and distinct absence of other development or man-made features apart from isolated farmsteads and large-scale agricultural buildings associated with Bonsdale Farm.	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
	The works and the panel areas are in close proximity to the receptor and are clearly visible together in views from selected viewpoints VP57, VP58, VP59 and VP61 and also from areas between these viewpoints as the route takes a course from Pilham Lane in the south as far as Kirton Road in the north.	Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some
	Sequential Occasional Visibility  The panel areas may appear with shorter time lapses between appearances because the observer may be moving more quickly (farm vehicles may be travelling at speed) and there are larger distances between the viewpoints along the route.	ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
Magnitude	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Significant	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Significant
	Operation (Year 15): Low Decommissioning: Low	Operation (Year 15): Low Decommissioning: Low
Type of Effect	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant





Transport Receptor - T040 / Access to Corringham Grange, Corringham

### **Baseline Context:**

This local access track serves the residential properties known as Corringham Grange Farm and The Cottage. The track extends from East Lane in the south (at the point where it makes a 'right-angled' turn towards the A631, Corringham Road). The track also extends as far north as The Cottage, where further access is restricted by the presence of Corringham Beck.

Looking north directly west and east over the Cottam 2 Site with the Cottam 3b Site beyond. The view is also looking south towards the Cottam 1 North Site.

**Distance to Cottam Sites**: 0m to Cottam 2 Site.

**Nearest Viewpoint/s:** VP46, VP48 and VP49.

# **Description of Route:**

The first section of the track extends as far as Corringham Grange Farm and is set with open arable fields to each side. There are also low-cut hedgerows that allow extended views towards the east and the west which feature little woodland and very limited tree cover. The second section of the track (as far as The Cottage) is set within a landscape made up of a mixture of arable land use and domestic properties in this local context of two residential properties.

There is a marked contrast between the first and second section softhe track since the first section is relatively more open with extended views east to west, compared to the second section which is influenced by domestic uses and the presence of farm buildings with the associated mature tree cover and domestic planting.

The route is influenced by the open and exposed nature of the arable fields, but the residential properties and the associated tree cover adds a more enclosed character in sharp contrast to the expansive agricultural use. There are also extended views towards the south but towards the north, the existing vegetation and the residential group curtails visibility in this direction. There is open visibility directly over the Cottam 2 Site due to the low height of intervening hedgerows and distinct lack of woodlands and tree cover.

Overall, this route is subject to very low levels of traffic and provides local access to residential dwellings. The track offers very few interesting features but there are clear open views across the landscape from east to west including views towards the distant landscape of Laughton Woods and Laughton Common and then towards the ridgeline at Blyborough. This is an ordinary route with some detracting features such as telegraph poles and wires and large-scale agricultural buildings. This track also takes account of the open arable landscape that is lacking in individual tree cover and groups of trees in close proximity to the receptor, which also limits the visual appeal. Overall, this route offers a very short journey for local residential access with very few features of interest.

**Sensitivity:** *Medium* 

# **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.



Transport Re	nsport Receptor - T040 / Access to Corringham Grange, Corringham			
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change
	The first section of the route would be significantly affected, particularly at the location where the route passes directly adjacent to the boundary of the Site/Sites. The users of the second section of the route would experience a lower level of change due to the intervening residential properties and that the construction works are set back at this location. The changes experienced from the first section of the route would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering the access track.  During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, and since there are no tree groups or large individual trees there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact. There would be a considerable change to the arable land use, but the field boundaries	The foreground of the views from the route at this first section would change from a large agricultural field to an area of panels, but only for a short section of the route. The changes would be experienced within the context of the surrounding arable fields with very few detractors. Further agricultural fields beyond this to the east and the north would be screened from route by the panels and the distant backdrop of Laughton Wood may be lost.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15) refer to Viewpoints VP46, VP48 and VP49.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.



[Reference: EN010133/APP/C6.3.8.3.4.2.4] January 2023 **Construction Access** Transport receptor will be affected by the proposed construction access into Cottam 2 Site. **Cable Route Corridor** Transport receptor is partially within the 500m cable route corridor study area. Substation/s Transport receptor is within 2km study area of Cottam 2 substation. Magnitude High Medium Medium Low Type of Adverse & Short Term Adverse & Long Term Adverse & Long Term Neutral & Short Term Effect Significance Minor **Not Significant** Moderate **Significant** Moderate-Major Significant Moderate **Significant** of Effect

от Еттест	<u> </u>				
Transport Re	Transport Receptor – T040 / Access to Corringham Grange, Corringham				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]			
	Sequential Frequent Visibility  The first section of the route would be significantly affected, particularly at the location where the route passes directly adjacent to the boundary of the Site/Sites. The users of the second section of the route would experience a lower level of change due to the intervening residential properties and that the construction works are set back at this location.  During the construction stage (the works) and during the operation stage (the panel areas) the effects would appear consistently and with short time lapses between instances. There is a slow speed of travel for walkers (farm vehicles may be travelling at speed) and there is a low boundary to the east and west of the route and so the distances between the areas of visibility would be frequent with no gaps between.  The foreground of the views from the route would change from the agricultural fields (to both sides of the route at the first section of the route) to reveal both the works during the construction stage and an area of panels and the substation during the operation stage, but they would be set back from the route. The changes would be experienced in close proximity and within the context of the surrounding arable fields with a prevailing character of openness but with the distinct presence of other development and man-made features associated with Corringham Grange Farm and The Cottage.  The works and the panel areas are in close proximity to the receptor and are clearly visible together in views from selected viewpoints. VP46, VP48 and VP49 and also from areas between these viewpoints as the route takes a course from Corringham Grange and The Cottage in the north as far as East Lane in the south.  Sequential Occasional Visibility The panel areas may appear with shorter time lapses between appearances because the observer may be moving more quickly (farm vehicles and resident cars may be travelling at speed) and there are larger distances between the viewpoints along the route.	Fobric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.  Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.2 [C6.4.8.15.2.2] which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.  There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]  Overall Landscape Character of the Unwooded Vales Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area.			
Magnitude	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Significant Operation (Year 15): Low Decommissioning: Low	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Significant Operation (Year 15): Low Decommissioning: Low			





		[
Type of	Construction: Adverse & Short Term	Construction: Adverse & Short Term
	Operation (Year 1): Adverse & Long Term	Operation (Year 1): Adverse & Long Term
	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Effect	Operation (Year 15): Neutral & Long Term	Operation (Year 15): Neutral & Long Term
	Decommissioning: Neutral & Short Term	Decommissioning: Neutral & Short Term
Significance of Effect	Construction: Minor <b>Not Significant</b>	Construction: Minor Not Significant
	Operation (Year 1): Minor <b>Not Significant</b>	Operation (Year 1): Minor <b>Not Significant</b>
	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant
	Operation (Year 15): Minor <b>Not Significant</b>	Operation (Year 15): Minor <b>Not Significant</b>
	Decommissioning: Minor Not Significant	Decommissioning: Minor Not Significant



Transport Receptor - T045 / From East Lane to A631, Corringham

#### **Baseline Context:**

East Lane is located to the east of the settlement of Corringham and to the west of the settlement of Hemswell. The lane leads from the A631 heading north and then takes a 'right-angled' turn before leading west towards Corringham. This is a short section of lane set with an open arable landscape to each side.

Looking north directly over the Cottam 2 Site with the Cottam 3b Site beyond. The view is also looking south towards the Cottam 1 North Site.

Distance to Cottam Sites: 0m to Cottam 2

**Nearest Viewpoint/s:** VP46, VP48 and VP49.

#### **Description of Route:**

The first section of the route passes east west from Corringham through an open arable landscape with large scale fields to each side and few hedgerow trees. The second section is similar in character to the first section, being open with extended views and set within the context of large-scale arable fields.

There is a marked contrast between the two sections of the route. The first (east west) section has higher levels of tranquility being at a further distance from the A631. The north-south sections connect directly with the A631 and is more exposed to traffic noise from the A631.

The route is influenced by the presence of the built edge of Corringham, which is a detractor. The tree cover is limited, the hedgerows are cut back, and the arable land use is intensively managed, but the presence of farreaching views towards the east adds some stimulus. Open visibility towards the Cottam 2 Site is evident, particularly at the first section of the route due to the low height of intervening hedgerows, the distinct lack of woodland and tree cover and that the lane forms a direct boundary with the Site/Sites.

Overall, this route is subject to passing traffic due to the connectivity with the A631 and that it provides access to the residential edge of Corringham. The lane offers very few interesting features but there are clear open views across the landscape from east to west including views towards the distant landscape of Laughton Woods and Laughton Common and then towards the ridgeline at Blyborough. This is an ordinary route with some detracting features such as telegraph poles and wires. This track also takes account of the open arable landscape that is lacking in individual tree cover and groups of trees in close proximity to the receptor, which also limits the visual appeal. Overall, this route offers a short journey for local residential access with very few features of interest.

**Sensitivity:** *Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

Neutral & Short Term



W	WILL
Cot	tam
SOLAR	PROJECT

Adverse & Short Term

**Effect** 

#### Transport Receptor - T045 / From East Lane to A631, Corringham Mitigation **Operation Magnitude of Construction Magnitude of Change** (Operation Magnitude of Change at **Decommissioning Magnitude** Change (Year 1) **Year 15)** of Change The first section of the route would be significantly affected, The foreground of the views from the Secondary mitigation such as planting, and A similar process to that of construction stage, but with the particularly at the location where the route passes directly adjacent to route at this first section would change grass seeding would be taken into account at Scheme being no longer operational. This is an assessment the boundary of the Site/Sites. The users of the second section of the from a large agricultural field (to the this stage. For details on operation magnitude of the Site in winter but assumes retention of existing route would experience a lower level of change due to the intervening north side of the lane) to an area of of change (Year 15), refer to Viewpoints VP46, vegetation and builds upon the proposed primary and secondary mitigation that had been established as the arable fields and that the construction works are set back from the panels, for a short straight section of the VP48 and VP49. hedgerows bordering East Lane. The changes experienced from the route. The changes would be future baseline. Effects are those arising from activities for first section of the route would include the construction activities experienced within the context of the the duration of the decommissioning to include site traffic, during site preparation / enabling works, construction, and surrounding arable fields with very few noise and vibration from decommissioning activities, dust commissioning with effects such as construction traffic, noise and features and the route has a straight generation and site runoff. vibration from construction activities, dust generation, site runoff, alignment with limited character. With mud on roads, and the visual intrusion of plant and machinery on site. the second section of the route, further At the early stages of the construction stage, ground, and lower-level agricultural fields beyond this to the east activities such as the construction of the solar panel areas and and west would not be screened from associated infrastructure and inverters would be partly screened due route by the panels and so the distant to the presence of foreground hedgerows bordering East Lane. During backdrop of Laughton Wood may still be the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, and since there are no tree groups or large individual trees there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites. Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows. These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south of the East Lane. **Construction Access** Transport receptor will be affected by the proposed construction access into Cottam 2 Site. Cable Route Corridor Transport receptor is partially within the 500m cable route corridor study area. Substation/s Transport receptor is within 2km study area for Cottam 2 Substation. Medium Magnitude Medium High Low Type of

Adverse & Long Term

Adverse & Long Term



Significance of Effect

Moderate Significant

Moderate Significant

Moderate Significant

Moderate Significant

Moderate Significant

Transport Re	ceptor - T045 / From East Lane to A631, Corringham	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	Sequential Frequent Visibility  The first section of the route would be significantly affected, particularly at the location where the route passes directly adjacent to the boundary of the Cottam 2 Site. The users of the second section of the route would experience a lower level of change due to the intervening arable fields and that the construction stage (the works) and the operation stage (the panel areas) are set back from the hedgerows bordering East Lane.  During the construction stage (the works) and during the operation stage (the panel areas) the effects would appear consistently and with short time lapses between instances. Although there is a slow speed of travel for walkers (road vehicles may be travelling at speed) and there is a low hedgerow boundary to East Lane and so the distances between the areas of visibility would be frequent with no gaps between.  The foreground of the views from the route would change from the agricultural fields (to the northern most part of the route at the first section of the route) to reveal both the works during the construction stage and an area of panels during the operation stage, but they would be set back from the route. The changes would be experienced in close proximity and within the context of the surrounding arable fields with a prevailing character of openness but in the context of other development and man-made features associated with Corringham Grange Farm and The Cottage.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area.  Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.  There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
	The works and the panel areas are in close proximity to the receptor and are clearly visible (at the northern most part of the first section of the route) together in views from selected Viewpoints VP46, VP48 and VP49 and also from areas between these viewpoints as the route takes a course from the access to Corringham Grange Farm in the north as far as Corringham Road in the south.  Sequential Occasional Visibility The panel areas may appear with shorter time lapses between appearances because the observer may be moving more quickly (farm vehicles may be travelling at speed) and there are larger distances between the viewpoints along the route. However, this location is at the junction where the road takes a right-angled turn and so the observer may be moving more slowly.	Overall Landscape Character and Visual Amenity Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
Magnitude	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Significant Operation (Year 15): Low Decommissioning: Low	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Significant Operation (Year 15): Low Decommissioning: Low
Type of Effect	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant



#### Transport Receptor - T072 / Access to Fillingham Grange, Fillingham

#### **Baseline Context:**

This local track is located to the west of the settlement of Fillingham and serves as access to Fillingham Grange. The track heads from its junction with Willingham Road in the south to meet with Kexby Road in the north and runs in a north south direction, taking a 'dog-leg' turn before passing Fillingham Grange. The route runs parallel with public bridleway (Fill/85/2) where it joins with Willingham Road in the south.

Looking in all directions towards the Cottam 1 North Site and south towards the Cottam 1 South Site (Land parcels A, B and C). The route is also looking northwest towards the Cottam 2 Site.

Distance to Cottam Sites: 0m to Cottam 1 North

**Nearest Viewpoint/s:** VP34, VP35 and LCC-C-G.

#### **Description of Route:**

The first section of the route leads from Willingham Road (as far as the first 'right angled' turn) in a north south direction and passes through a series of medium scale arable fields. There are gappy hedgerows and some scrub cover to the east side of the track. The west side of the track has an open boundary with the agricultural field with no hedgerows where there are views directly towards the public bridleway (Fill/85/2). The central section of the route heads east west (as far as Fillingham Grange) passing a small woodland to the south of the route. The final section of the route then heads north south, passing across a large and expansive arable field before stopping short of Kexby Road at the junction with the minor water course (small tributary of the River Till).

There is a marked contrast between the first two sections of the route, which pass across medium scale fields that form an irregular pattern with dividing hedgerows and several mature trees and the presence of woodland. In contrast, the final section of the route is more open with no hedgerows to each side with wide views east to west towards the local tributaries of the River Till and small woodlands.

The route is influenced by the presence of the local tributaries of the River Till, which add some tree cover and minor undulations across the area. The tree cover is limited along the final section of the route, but more evenly distributed along the first two sections. The hedgerows are cut back, and the arable land use is intensively managed, but the presence of wide-reaching views towards the east adds some stimulus along its length. Open visibility towards Cottam 2 Site is evident, particularly at the first section of the route due to the lack of intervening hedgerows to the west. The distinct lack of woodland, hedgerows, and tree cover along the final section of the route forms a direct boundary with the Cottam 1 North Site and open visibility.

Open visibility towards Cottam 1 North Site due to the low height of intervening hedgerows and distinct lack of woodland and tree cover. New planting along the boundaries (where they border this local track) of the Site/Sites will curtail visibility in Year 1 and help close down some visibility in Year 15.

Overall, this route is subject to no passing traffic due to it being a local access track serving residential properties and agricultural land. The track offers a transition of features ranging from enclosed parts in the south to clear open views across the landscape from east to west including views towards the distant landscape of Laughton Woods and Laughton Common and then towards the ridgeline at Blyborough. This is an ordinary route that takes account of the open arable landscape in close proximity to the receptor. Overall, this route offers a journey for local residential access with no outstanding features of interest.

**Sensitivity:** *Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Medium

Magnitude

[Reference: EN010133/APP/C6.3.8.3.4.2.6\_A] January 2023 Transport Receptor - T072 / Access to Fillingham Grange, Fillingham Mitigation **Operation Magnitude of Change** (Operation Magnitude of Change **Construction Magnitude of Change Decommissioning Magnitude** (Year 1) of Change at Year 15) The first and second sections of the route would not be significantly The foreground of the views from the route at Secondary mitigation such as planting, and A similar process to that of construction stage, but with the affected, due to the separation provided by the intervening arable this final section would change from a large grass seeding would be taken into account Scheme being no longer operational. This is an assessment fields and the presence of a consistent hedgerow network with good agricultural field (to both sides of the route) to at this stage, but the Scheme would of the Site in winter but assumes retention of existing tree cover, where the construction works would be set back from an area of panels, but only for a short straight introduce panels to both sides of the vegetation and builds upon the proposed primary and these features. The users of the final section of the route would section of the route. The changes would be secondary mitigation that had been established as the access track. For details on the planting experience a significant level of change particularly at the location experienced within the context of the mitigation for the operation magnitude of future baseline. Effects are those arising from activities for where the route passes directly adjacent to the boundary of the surrounding arable fields with very few change (Year 15), please refer to the duration of the decommissioning to include site traffic, Site/Sites. The changes experienced from the final section of the route Viewpoints VP34, VP35 and LCC-C-G. features and the route has a straight noise and vibration from decommissioning activities, dust would include the construction activities during site preparation / alignment with limited character. generation and site runoff. enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would not be screened due to the absence of foreground hedgerows. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites. Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows. These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature at the final section of the route. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact beyond. There would not be a fundamental change to the surroundings to the north and east of the route. **Construction Access** Transport receptor will be affected by the Proposed Construction access into Cottam 1 North Site. Cable Route Corridor Transport receptor is outside of the 500m cable route corridor study area. Substation/s Transport receptor is outside of the 2km study area for Cottam 1 North Substation.

High

Medium

Low



Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term
Significance of Effect	Moderate <b>Significant</b>	Moderate-Major <b>Significant</b>	Moderate <b>Significant</b>	Minor Not Significant

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
-	Sequential Frequent Visibility	Fabric of the Landscape
	The first and second sections of the route would not be significantly affected, due to the separation	There would not be the removal of or changes in individual elements or features of the landscape within the charact
	provided by the intervening arable fields and the presence of a consistent hedgerow network with good	area.
	tree cover, where the construction works would be set back from these features. The users of the final	
	section of the route would experience a significant level of change particularly at the location where the	There would be the introduction of new elements and features comprising the solar panel areas and the substation
	route passes directly adjacent to the boundary of the Cottam 1 North Site/Sites.	within the character area
	During the construction stage (the works) and during the operation stage (the panel areas) the effects	Aesthetic Aspects of the Landscape
	would appear consistently and with short time lapses between instances. Although there is a slow speed	Refer to Figure <b>8.15.2.1</b> [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the
	of travel for walkers (farm vehicles may be travelling at speed) and there is an open boundary to the	cumulative developments would not be experienced across the majority of the 5km study area. This is due to the
	east and west of the route and so the distances between the areas of visibility would be frequent with	distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements
	no gaps between.	built form would also curtail cumulative visibility.
	The foreground of the views from the route would change from the agricultural fields (to both sides of	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1
	the route at the final section of the route) to reveal both the works during the construction stage and an	Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set of
	area of panels during the operation stage, but they would be set back from the route. The changes	further detail within the following figures:
	would be experienced in close proximity and within the context of the surrounding arable fields with a	
	prevailing character of openness and distinct absence of other development or man-made features	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]
	apart from isolated farmsteads.	Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
	The weeks and the manel areas are in close previous to the resenter and are closely visible together in	Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	The works and the panel areas are in close proximity to the receptor and are clearly visible together in views from selected viewpoints VP34, VP35, VP41 and LCC-C-G and also from areas between these	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or
	viewpoints as the route takes a course from Willingham Road in the south as far as Kexby Road in the	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or different from another. The strategic major road network is defined by important historic routes and in contrast, the
	north.	west minor road network links several historic and distinctive smaller string of settlements across the area. Overall,
	moral.	prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grass
	Sequential Occasional Visibility	verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across
	The panel areas may appear with shorter time lapses between appearances because the observer may	area.
	be moving more quickly (farm vehicles may be travelling at speed) and there are larger distances	
	between the viewpoints along the route.	Overall Landscape Character and Visual Amenity
		Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic
		settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are featur
		value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristi
		the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulat
		visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications a
		infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with b
		form that plays a positive role in reducing the overall cumulative effects.
1	Construction: Low	Construction: Low
	Operation (Year 1): Low	Operation (Year 1): Low
	Operation (Year 1): with only Embedded Mitigation: Low Not Significant	Operation (Year 1): with only Embedded Mitigation: Low Not Significant
	Operation (Year 15): Low	Operation (Year 15): Low
	Decommissioning: Low	Decommissioning: Low





SOLAR PROJECT		
	Construction: Adverse & Short Term	Construction: Adverse & Short Term
	Operation (Year 1): Adverse & Long Term	Operation (Year 1): Adverse & Long Term
	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Effect	Operation (Year 15): Neutral & Long Term	Operation (Year 15): Neutral & Long Term
	Decommissioning: Neutral & Short Term	Decommissioning: Neutral & Short Term
	Construction: Minor <b>Not Significant</b>	Construction: Minor Not Significant
Significance	Operation (Year 1): Minor <b>Not Significant</b>	Operation (Year 1): Minor <b>Not Significant</b>
of Effect	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant
	Operation (Year 15): Minor <b>Not Significant</b>	Operation (Year 15): Minor <b>Not Significant</b>
	Decommissioning: Minor Not Significant	Decommissioning: Minor Not Significant



[Reference: EN010133/APP/C6.3.8.3.4.2.7\_A] January 2023

### Transport Receptor - T074 / Willingham Road, Fillingham

#### **Baseline Context:**

Willingham Road is located to the southwest of the settlement of Fillingham and to the northwest of the settlement of Ingham. This section of the road heads west from Fillingham at Church Farm as far as Gypsy Lane where it then joins with Fillingham Lane in the west at the junction with Gypsy Lane. The road broadly takes an east west alignment with some wide 'dog-leg' turns.

Looking directly over the Cottam 1 North Site/Sites.

Distance to Cottam Sites: 0m to Cottam 1 North Site/Sites

**Nearest Viewpoint/s:** VP31, VP33, VP37, LCC-C-G, LCC-C-H and LCC-C-I.

#### **Description of Route:**

The first section of the route passes through an arable landscape (as far as Glebe Farm) in an east west direction with roadside hedgerows and consistent grass verges to each side. Some of the hedgerows are grown out and there are occasional trees. The central section of the route continues through the arable landscape (as far as Turpin Farm) in an east west direction where the roadside hedgerows and grass verges continue to frame the route. This section of the route takes a 'dog-leg' turn passing several entrances to farmsteads and residential properties (Side Farm, Turpin's Farm, Turpin's Bungalow and North Farm) interspersed with small woodlands. The final section of the route is the shortest part that passes between Turpin's Bungalow and Gypsy Lane and is a straight alignment with low-cut hedgerows to each side and drainage ditches. The hedgerows along this section of the route have no individual or groups of trees.

There is a marked contrast between the central section of the route, which passes through a more enclosed context due to the presence of the residential properties and their associated tree cover and agricultural buildings. The 'dog-leg' alignment also helps to create enclosure. In contrast, the first and the final sections of the route follow a straight alignment within a more open context of limited tree cover and woodlands to each side. The route is influenced by the arable fields and a landscape that is un-spoilt with very few man-made interventions, apart from the central section where the residential properties and farmsteads exert a built influence but shrouded in tree cover. The woodlands on the horizon form a significant component and add balance to the landscape and the mature ash trees within the hedgerows are also a strong feature. There are extended views south along the ridgeline towards Ingham Cliff and the route offers limited intimacy in the first and the final sections due to the lack of field hedgerows and the intensive arable land use. The horizon closes down views along the route since the landform rises to a high point on Willingham Road at approximately 20m AOD.

Overall, this route offers a pleasant journey that is typical in character to the wider rolling arable landscape. There are interesting features including woodland blocks and isolated oak trees, but the field hedgerows are cut back, and the arable land use is intensively managed,

**Sensitivity:** *Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change
The first section of the route would not be significantly affected, due to the separation provided by the intervening arable fields, the presence of a consistent hedgerow network and the distance from the construction works. The users of the central and final section of the route would however experience a significant level of change particularly at the location where the route passes directly adjacent to the boundary of the Site/Sites in the final section. The changes experienced from the central and final sections of the route would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows, built form and tree cover in the central section of the route. The final section of the route would experience more open views of the construction activities. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites at the final section of the route.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature at the final section of the route. The cen	The foreground of the views from the route at the final section would change from a large agricultural field (to both sides of the route) to an area of panels, but only for a short straight section of the route. The changes would be experienced within the context of the surrounding arable fields with very few features and the route has a straight alignment with limited character. With the central section of the route, there would be a change from arable fields along the majority of the southern section of the route, but the panels would be set back from the roadside hedgerows. The northern section of the central part of the route would only experience changes to both sides of the route from arable to panels for a short section of the route between Side Farm and the junction with Gypsy Lane.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage, but the Scheme would introduce panels to both sides of the road. For details on the planting mitigation for the operation magnitude of change (Year 15), please refer to Viewpoints VP31, VP33, VP37, LCC-C-G, LCC-C-H and LCC-C-I.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the full baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, nand vibration from decommissioning activities, dust generation and site runoff.



	Transport receptor is partially within the 2km study area; the western section between Fillingham Lane and Turpins Bungalows			
Magnitude	Medium	High	Medium	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term
Significance of Effect	Moderate <b>Significant</b>	Moderate-Major <b>Significant</b>	Moderate <b>Significant</b>	Minor <b>Not Significant</b>

ansport Re	ceptor – T074 / Willingham Road, Fillingham	
-Combinati	ion Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	Sequential Frequent Visibility	<u>Fabric of the Landscape</u>
	The first section of the route would not be significantly affected, due to the separation	There would not be the removal of or changes in individual elements or features of the landscape within the characte
	provided by the intervening arable fields, the presence of a consistent hedgerow network and	area.
	the distance from the construction works. The users of the central and final section of the	
	route would however experience a significant level of change particularly at the location	There would be the introduction of new elements and features comprising the solar panel areas and the substation a
	where the route passes directly adjacent to the boundary of the Site/Sites on both sides of the	within the character area
	route in the final section.	
		Aesthetic Aspects of the Landscape
	During the construction stage (the works) and during the operation stage (the panel areas)	Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the
	would appear consistently and with short time lapses between instances. Although there is a	cumulative developments would not be experienced across the majority of the 5km study area. This is due to the
	slow speed of travel for walkers (road users may be travelling at speed), there is a hedgerow	distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements
	boundary to both sides of the route and so the distances between the areas of visibility would	built form would also curtail cumulative visibility.
	be less frequent with some gaps between.	g,
	6 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1
	The foreground of the views from the route would change from the agricultural fields (to the	Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set o
	south side of the central section of the route and to both sides of the final section of the	further detail within the following figures:
	route) to reveal both the works during the construction stage and an area of panels during the	
	operation stage, but they would be set back from the route. The changes would be	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]
	experienced in close proximity and within the context of the surrounding arable fields with a	Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
	prevailing character of openness and distinct absence of other development or man-made	Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	features, apart from the isolated farmsteads and the long straight presence of Willingham	
	Road.	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or
		different from another. The strategic major road network is defined by important historic routes and in contrast, the
	The works and the panel areas are in close proximity to the receptor and are clearly visible	east west minor road network links several historic and distinctive smaller string of settlements across the area. Ove
	along the central and final sections of the route together in views from selected viewpoints	the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide
	VP31, VP33, VP37, LCC-C-G, LCC-C-H and LCC-C-I and also from areas between these	grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility
	viewpoints as the route takes a course from Fillingham in the east and Willingham by Stow in	across the area.
	the west.	deross the dred.
	the west.	Overall Landscape Character and Visual Amenity
	Sequential Occasional Visibility	Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic
	The panel areas may appear with shorter time lapses between appearances because the	settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are feature
	observer may be moving more quickly (road users may be travelling at speed) and there are	value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristic
	larger distances between the viewpoints along the route.	the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulati
	larger distances between the viewpoints along the route.	visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications ar
		infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with bu
		form that plays a positive role in reducing the overall cumulative effects.
	Construction: Low	Construction: Low
	Operation (Year 1): Low	Operation (Year 1): Low
agnitude	Operation (Year 1): with only Embedded Mitigation: Low Not Significant	Operation (Year 1): with only Embedded Mitigation: Low Not Significant
	Operation (Year 15): Low	Operation (Year 15): Low

Cottam

Transport Receptor - T074 / Willingham Road, Fillingham			
In-Combina	tion Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	Decommissioning: Low	Decommissioning: Low	
Type of Effect	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term	
Significance of Effect	Construction: Minor Not Significant	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant	



[Reference: EN010133/APP/C6.3.8.3.4.2.9 A] January 2023

#### **Transport Receptor - T110 / Blackthorn Lane, Cammeringham**

#### **Baseline Context:**

Blackthorn Lane is located to the west of the settlement of Cammeringham. This section of the lane heads from the B1398 at Cammeringham in the east, passing in a straight alignment towards the west serving residential properties at Blackthorn Hill and then extends as far as further residential properties known as Cold Harbour and Furze Hill where the track then joins with receptor T109 (Unnamed Road, Stow).

Looking directly southwest over the Cottam 1 South Site and northwest over the Cottam 1 North Site and Cottam 1 South Site.

Distance to Cottam Sites: 0m to Cottam 1 South Site.

Nearest Viewpoint/s: VP22, VP23 and LCC-C-D.

#### **Description of Route:**

The first section of the route (as far as Long Covert) passes through a large-scale arable landscape with extensive field systems that supports very few hedgerows or tree cover. The field system to the south of the route at this section is an irregular, but geometric mix of fields interspersed by strong woodland blocks that form a notable collection of local woodlands. In contrast, the fields to the north of the track at this section are less geometric, large scale and extensive due to the distinct lack of hedgerows. The second section of the route (as far as Cammeringham) passes through a similar system of arable fields that support very few hedgerows or tree cover, except that the outlying landscape to the south at Brattleby takes on a distinct change in character to reveal smaller field systems with a good network of mature trees including field trees.

There is very little in contrast between the first and second sections of the route as both pass through an open context of geometric fields, where some are divided by low hedgerows or none at all. Although there is absence of individual tree cover to either side of the route, there are extended views towards the south which capture the local collection of geometric woodland blocks. The second section of the route is set within a slightly more enclosed context due to the presence of the woodlands which curtail visibility towards the south. The route is influenced by the arable fields and a landscape that is tranguil with very few man-made interventions.

Overall, this route offers a journey across a simple landscape with very few elements or features of interest. This is an isolated location with a sense of safety and security. There are intensive levels of management within the arable farmland and so the route is influenced by the regular and geometric fields with few hedgerow divisions. The woodland at Brattleby Hall is just visible in the distance to the south of the route and the tree cover associated with Stow Lane is also just visible on the horizon to the north. There are some extended views, but there is also a tall, distinctive hedgerow to north of Blackthorn Lane that closes down views in this direction, whereas in contrast the hedgerow to the south of Blackthorn Lane lack's structure and is gappy in parts giving more visibility in this direction.

#### **Sensitivity:** *Medium*

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

Transport Re	Transport Receptor - T110 / Blackthorn Lane, Cammeringham				
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)		Decommissioning Magnitude of Change	



The first section of the route would be significantly affected where it passes directly adjacent to the boundary of the Site/Sites. The construction works would be located on both sides of the route. The second section of the route would not be significantly affected, as there are no works to each side and oblique views towards the first section of the route would be masked by the intervening hedgerows. The changes to the first section of the route would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows and tree cover. The first section of the route would experience more open views of the construction activities. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites at the first section of the route.

Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.

These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature at the first section of the route. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the north and south of the second section of the route.

#### **Construction Access**

Transport receptor will be affected by the proposed construction access into Cottam 1 South Site.

#### **Cable Route Corridor**

Transport receptor is outside of the 500m cable route corridor study area.

#### Substation/s

Transport receptor is outside of the 2km study area for Cottam 1 North substation.

The foreground of the views from the route at the first section would change from the agricultural fields (to both sides of the route) to an area of panels, but they would be set back behind the existing hedgerows. The changes would be experienced within the context of the surrounding arable fields with a prevailing character of openness and distinct absence of features.

Secondary mitigation such as planting, and grass seeding would be taken into account at this stage, but the Scheme would introduce panels to both sides of the lane. For details on the planting mitigation for the operation magnitude of change (Year 15), please refer to Viewpoints VP22, VP23 and LCC-C-D.

A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.

Magnitude	Medium	High	Medium	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term



				111111111111111111111111111111111111111
Significance of Effect	Moderate <b>Significant</b>	Moderate-Major <b>Significant</b>	Moderate <b>Significant</b>	Minor Not Significant

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
-	Sequential Frequent Visibility	<u>Fabric of the Landscape</u>
	The first section of the route would be significantly affected where it passes directly adjacent to the boundary of the Site/Sites. The construction works would be located on both sides of the route. The	There would not be the removal of or changes in individual elements or features of the landscape within the charact area.
	second section of the route would not be significantly affected, as there are no works to each side and oblique views towards the first section of the route would be masked by the intervening hedgerows.	There would be the introduction of new elements and features comprising the solar panel areas and the substation
	During the construction stage (the works) and during the operation stage (the panel areas) would	within the character area
	appear consistently and with short time lapses between instances. Although there is a slow speed of	Aesthetic Aspects of the Landscape
	travel for walkers (road users may be travelling at speed), there is a hedgerow boundary to both sies of	Refer to Figure <b>8.15.2.1</b> [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the
	the lane and so the distances between the areas of visibility would be less frequent with some gaps	cumulative developments would not be experienced across the majority of the 5km study area. This is due to the
	between.	distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlement built form would also curtail cumulative visibility.
	The foreground of the views from the route would change from the agricultural fields (to both sides of	
	the route) to reveal both the works during the construction stage and an area of panels during the	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1
	operation stage, but they would be set back from the route. The changes would be experienced in close proximity and within the context of the surrounding arable fields with a prevailing character of openness and distinct absence of other development or man-made features apart from isolated	Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set further detail within the following figures:
	farmsteads.	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
	The works and the panel areas are in close proximity to the receptor and are visible together in views	Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	from selected viewpoints VP22, VP23 and LCC-C-D and also from areas between these viewpoints as	
	the route takes a course from the settlement of Cammeringham in the east as far as Furze Hill in the	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type of
	west.	different from another. The strategic major road network is defined by important historic routes and in contrast, the
		west minor road network links several historic and distinctive smaller string of settlements across the area. Overall
	Sequential Occasional Visibility	prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grass
	The panel areas may appear with shorter time lapses between appearances because the observer may	verges and they have a major role in helping to define the quality of the landscape and reducing the visibility acros.
	be moving very quickly (road users may be travelling at speed) and there are larger distances between the viewpoints along the route.	area.
		Overall Landscape Character and Visual Amenity
		Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of histor
		settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are featu
		value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics
		the landscape and land use have some ability to accommodate change without undue adverse effects. The cumular
		visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications a
		infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with be
		form that plays a positive role in reducing the overall cumulative effects.
	Construction: Low	Construction: Low
	Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Significant	Operation (Year 1): Low
	Operation (Year 1): With only Embedded Milligation: Low Not Significant  Operation (Year 15): Low	Operation (Year 1): with only Embedded Mitigation: Low Not Significant Operation (Year 15): Low
	Decommissioning: Low	Decommissioning: Low
	Construction: Adverse & Short Term	Construction: Adverse & Short Term
	Operation (Year 1): Adverse & Long Term	Operation (Year 1): Adverse & Long Term
	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
	Operation (Year 15): Neutral & Long Term	Operation (Year 15): Neutral & Long Term
	Decommissioning: Neutral & Short Term	Decommissioning: Neutral & Short Term



Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.4.2: Transport Receptors – Transport Significant [Reference: EN010133/APP/C6.3.8.3.4.2.9\_A] January 2023

Significance of Effect	Construction: Minor Not Significant	Construction: Minor Not Significant
		Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant
	Operation (Year 15): Minor <b>Not Significant</b>	Operation (Year 15): Minor <b>Not Significant</b>
	Decommissioning: Minor <b>Not Significant</b>	Decommissioning: Minor <b>Not Significant</b>



[Reference: EN010133/APP/C6.3.8.3.4.2.10\_A] January 2023

#### Transport Receptor - T119 / Fleets Lane, Sturton by Stow

#### **Baseline Context:**

Fleets Lane is located to the east of the settlements of Stow and Sturton by Stow. This section of the lane passes in a north south direction between Ingham Road and Fleets Road. The lane follows an almost straight alignment with a few shallow turns to take account of smaller-scale field patterns, particularly to the south of the route. The lane is bordered by hedgerows to each side that are low cut in some parts, and in some places, there are no hedgerows which allow views across their bounds.

Looking east towards the Cottam 1 South Site.

**Distance to Cottam Sites**: 0m to Cottam 1 South.

**Nearest Viewpoint/s:** VP8, VP10 and VP13.

#### **Description of Route:**

The first section of the route (as far as public footpath Stur/73/1) passes through a large-scale arable landscape with extensive field systems that take an irregular pattern due to the meandering influence of the River Till and its associated tributaries. The field system to the west of the route at this section is regular, interspersed with very few hedgerows and extends as far as the settlement edge of Sturton by Stow where smaller fields define the boundary of the residential areas. In contrast, the fields to the east of the route at this section are less geometric, still large scale and extensive due to the distinct lack of hedgerows but the River Till divides the landscape. The second section of the route (as far as Ingham) passes through a similar system of arable fields that support very few hedgerows or tree cover, except that the outlying landscape to the west takes on a greater distance between the route and the settlement edge of Stow (compared to the distance to Sturton by Stow).

There is a subtle contrast between the first and second sections of the route. Both pass through an open context of geometric fields, where some are divided by low hedgerows or none at all, but the first section of the route is more open with large expanses where there are no roadside hedgerows, particularly to the east side. The first section of the route also has less visibility towards the east due to the intervening landform and so the Limestone Scarps and Dipslope Character Area 6a is less of a feature. Although there is absence of individual tree cover to either side of the route on both sections, there is relatively more tree cover to the second section of the route. Although the second section of the route is set within a slightly more enclosed context there is open visibility towards the distant horizon that captures Character Area 6a. The route is influenced by the arable fields and a landscape that is tranquil with very few man-made interventions, other than views towards the settlements which includes views of the Grade II listed Church of St Hugh of Avalon (List Entry: 1146772) on Stow Road, Sturton by Stow.

Overall, this route offers a journey across a simple landscape with very few elements or features of interest. There are intensive levels of management within the arable farmland and so the route is influenced by the regular and geometric fields divided with few hedgerow divisions. The collection of small woodlands to the west of Brattleby are just visible in the distance to the east of the first section of route and the tree cover associated with Stow Lane is also just visible on the horizon to the south. There are some extended views where the absence of hedgerows enhances the feeling of scale along the route, and which opens up views along its length as it approaches Fleets Road in the south. This is a quiet location (even though it is in close proximity to Sturton by Stow) with a notable absence of settlement or other busy roads. This route offers an interesting journey along an attractive local lane with distinctive grass verges. The experience is a pleasant and invigorating.

**Sensitivity:** *Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Magnitude

Medium

#### Transport Receptor - T119 / Fleets Lane, Sturton by Stow Mitigation **Operation Magnitude of** (Operation Magnitude of Change at **Construction Magnitude of Change Decommissioning Magnitude** Change (Year 1) of Change The first section of the route would not be significantly affected, as there The foreground of the views from the Secondary mitigation such as planting, and A similar process to that of construction stage, but with the are no construction works to each side and oblique views towards the route at the second section would grass seeding would be taken into account at Scheme being no longer operational. This is an assessment second section of the route would be masked by the intervening change from the agricultural fields (to this stage, but the Scheme would introduce of the Site in winter but assumes retention of existing hedgerows lining Fleets Lane and within the intervening field systems. one side of the route) to an area of panels to the east side of the lane. For details vegetation and builds upon the proposed primary and The second section of the route would be significantly affected where it panels, but they would be set back on the planting mitigation for the operation secondary mitigation that had been established as the passes directly adjacent to the boundary of the Site/Sites. The behind the existing hedgerows. The magnitude of change (Year 15), please refer to future baseline. Effects are those arising from activities for construction works would be located on one side of the route (east side) changes would be experienced within Viewpoints VP8, VP10 and VP13. the duration of the decommissioning to include site traffic, and they would only be adjacent to Fleets Lane for a short section of the noise and vibration from decommissioning activities, dust the context of the surrounding arable route. The changes to the second section of the route would include the fields that are intensive use with very generation and site runoff. construction activities during site preparation / enabling works, some simple features, and limited construction, and commissioning with effects such as construction traffic, character. noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites at the second section of the route. Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows. These short-lived construction activities would obstruct a framed proportion of the view and be a dominant feature for only a short length at the second section of the route. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the west and south of the second section of the route. **Construction Access** Transport receptor will be affected by the proposed Construction access into Cottam 1 South Site. **Cable Route Corridor** Transport receptor is outside of the 500m cable route corridor study area. Substation/s Only a very short section of this transport receptor is within the 2km study area, the northern-most 60m from Ingham Road (approx.)

Medium

Low

High



Type of Effect

Adverse & Short Term

Adverse & Long Term

Adverse & Long Term

Adverse & Long Term

Neutral & Short Term

Significance of Effect

Moderate Significant

Moderate Significant

Moderate Significant

Moderate Significant

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	mi-combination Effects [camalative sites]	cumulative Effects [cumulative Developments]
	Sequential Frequent Visibility	<u>Fabric of the Landscape</u>
	The first section of the route would not be significantly affected, as there are no construction works to	There would not be the removal of or changes in individual elements or features of the landscape within the charac
	each side and oblique views towards the second section of the route would be masked by the	area.
	intervening hedgerows lining Fleets Lane and within the intervening field systems. The second section of	
	the route would be significantly affected where it passes directly adjacent to the boundary of the	There would be the introduction of new elements and features comprising the solar panel areas and the substation
	Site/Sites.	within the character area
	During the construction stage (the works) and during the operation stage (the panel areas) would	Aesthetic Aspects of the Landscape
	appear consistently and with short time lapses between instances. Although there is a slow speed of	Refer to Figure <b>8.15.2.1</b> [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the
	travel for walkers (road users may be travelling at speed), there is a hedgerow boundary to the east and	cumulative developments would not be experienced across the majority of the 5km study area. This is due to the
	so the distances between the areas of visibility would be less frequent with some gaps between.	distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements
		built form would also curtail cumulative visibility.
	The foreground of the views from the route would change from the agricultural fields (to one side of the	
	route) to reveal both the works during the construction stage and an area of panels during the	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1
	operation stage, but they would be set back from the route and only adjacent to the road for a short	Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set
	section at its northern end and the junction with Ingham Road. The changes would be experienced in	further detail within the following figures:
	close proximity and within the context of the surrounding arable fields with a prevailing character of	
	openness and distinct absence of other development or man-made features apart from isolated	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]
	farmsteads and the nearby settlement edge of Stow.	<b>Figure 8.15.2.8</b> Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV <b>[C6.4.8.15.2.8] Figure 8.15.2.9</b> Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV <b>[C6.3.4.15.2.9]</b>
	The works and the panel areas are in close proximity to the receptor (for a very short length of the	
	route) and are clearly visible together in views from selected viewpoints VP8, VP10 and VP13 and also	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or
	from areas between these viewpoints as the route takes a course from the junction with Fleets Road in	different from another. The strategic major road network is defined by important historic routes and in contrast, the
	the south to meet with Ingham Road in the north.	west minor road network links several historic and distinctive smaller string of settlements across the area. Overall,
		prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grass
	Sequential Occasional Visibility	verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across
	The panel areas may appear with shorter time lapses between appearances because the observer may	area.
	be moving more quickly (road users may be travelling at speed) and there are larger distances between	
	the viewpoints along the route.	Overall Landscape Character and Visual Amenity
		Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic
		settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are featu
		value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristic
		the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulat
		visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications at
		infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with b
		form that plays a positive role in reducing the overall cumulative effects.
	Construction: Low	Construction: Low
	Operation (Year 1): Low	Operation (Year 1): Low
nitude	Operation (Year 1): with only Embedded Mitigation: Low Not Significant	Operation (Year 1): with only Embedded Mitigation: Low Not Significant
	Operation (Year 15): Low	Operation (Year 15): Low
	Decommissioning: Low	Decommissioning: Low



[Reference: EN010133/APP/C6.3.8.3.4.2.10\_A] January 2023

Cottam		Appendix 8.3.4.2: Transpo [Reference: EN010133/A	
	Construction: Adverse & Short Term	Construction: Adverse & Short Term	
Type of	Operation (Year 1): Adverse & Long Term	Operation (Year 1): Adverse & Long Term	
Type of	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Terr	
Effect	Operation (Year 15): Neutral & Long Term	Operation (Year 15): Neutral & Long Term	
	Decommissioning: Neutral & Short Term	Decommissioning: Neutral & Short Term	

Construction: Minor **Not Significant**Operation (Year 1): Minor **Not Significant** 

Operation (Year 1): with only Embedded Mitigation: Minor Not Significant
Operation (Year 15): Minor Not Significant
Decommissioning: Minor Not Significant

Construction: Minor **Not Significant** 

Significance

of Effect

Operation (Year 1): Minor **Not Significant** 

Operation (Year 15): Minor **Not Significant** Decommissioning: Minor **Not Significant** 

Operation (Year 1): with only Embedded Mitigation: Minor Not Significant



Transport Receptor - T120 / Unnamed Road, Stow

#### **Baseline Context:**

The Unnamed Road is located to the north of Thorpe le Fallows and to the west of Thorpe Wood. This short section of the road passes in a north south direction providing access to the residential property known as The Grange.

Looking east and west towards the Cottam 1 South Site.

Distance to Cottam Sites: 0m to Cottam 1 South Site

**Nearest Viewpoint/s:** VP5, VP11 and VP12.

#### **Description of Route:**

This section of the route passes through a large-scale arable landscape with an extensive system of fields of a varying size that take a regular pattern. Most of the fields are rectangular. This field system is interspersed with some hedgerows and extends as far as the small woodland shelterbelt known as Thorpe Wood. The collection of fields support limited tree cover, however the strong presence of Thorpe compensates for the lack of tree cover. The outlying landscape to the west has some riparian tree cover bordering the River Till, which is evident in the context of the route.

There is little contrast between each end of the route where both pass through a context of geometric fields, but the section closer to the Grange is more open away from the immediate setting of Thorpe Wood. The route also has less visibility towards the east and west due to the presence of Thorpe Wood and the meandering course of the River Till. There is absence of individual tree cover to either side of the route. The route is influenced by the arable fields and the man-made interventions at The Grange. The intervening woodland blocks to the west of Brattleby also add enclosure to the east.

Overall, this route offers a very journey through a simple landscape with very few elements or features of interest other than Thorpe Wood. There are intensive levels of management within the arable farmland and so the route is influenced by the regular and geometric fields. The collection of small woodlands to the west of Brattleby are a feature and the tree cover associated with Thorpe Lane is also just visible. This is a quiet location with a notable absence of settlement or other busy roads. This route offers an interesting journey, serves as access to the arable fields and is a public bridleway (TLFe/31/2).

**Sensitivity:** *High to Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Transport Re	ort Receptor – T120 / Unnamed Road, Stow				
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change	
	This section of the route would be significantly affected where it passes directly adjacent to the boundary of the Site/Sites, beyond the southern end of Thorpe Wood. The construction works would be located each side of the route (east and west) but the western edge of the route has a tall hedgerow and this is only a short section of route. The changes to this route would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would not be screened to the east of the route since there are no foreground hedgerows, but the west side of the route has a tall hedgerow and so there would be no direct and open visibility of the construction works. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites at the eastern side of the route.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a narrow and proportion of the view and be a dominant feature but only for a short section of the route. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact. There would not be a	The foreground of the views from the route to the eastern side would change from the agricultural fields to an area of panels, but they would only be set back behind the existing hedgerows to the east side and the west side would have open and expansive views of the panels. The changes would be experienced within the context of the surrounding arable fields that are in intensive use with very some simple features, with little tree cover and a limited character.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage, but the Scheme would introduce panels to both sides of the road. For details on the planting mitigation for the operation magnitude of change (Year 15), please refer to Viewpoints VP5, VP11 and VP12.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.	
Magnitude	Medium	High	Medium	Low	
Level of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term	



Significance of Effect

Moderate-Major Significant

Major Significant

Moderate-Major Significant

Moderate-Major Significant

Transport Re	nsport Receptor – T120 / Unnamed Road, Stow				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]			
	<u>Sequential Frequent Visibility</u> This section of the route would be significantly affected where it passes directly adjacent to the boundary of the Site/Sites, beyond the southern end of Thorpe Wood.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.			
	During the construction stage (the works) and during the operation stage (the panel areas) would appear consistently and with short time lapses between instances. Although there is a slow speed of travel for walkers (horse riders may be travelling at speed), this is an open boundary to the east and so the distances between the areas of visibility would be frequent with no gaps between.  The foreground of the views from the route would change from the agricultural fields (to one side of the route) to reveal both the works during the construction stage and an area of panels during the operation stage, but they would be set back from the route. The changes would be experienced in close proximity and within the context of the surrounding arable fields with a prevailing character of openness and distinct absence of other development or man-made features apart from isolated farmsteads.  The works and the panel areas are in close proximity to the receptor and are clearly visible together in views from selected viewpoints VP5, VP11 and VP12 and also from areas between these viewpoints as the route takes a course from the minor access to The Grange to the north of Thorpe Wood.  Sequential Occasional Visibility  The panel areas may appear with shorter time lapses between appearances because the observer may be moving more quickly (farm vehicles may be travelling at speed) and there are larger distances between the viewpoints along the route.	There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area  **Aesthetic Aspects of the Landscape** Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.  There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:  Figure 8.15.2.6 Cottam 1, 2,3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.9]  The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.			
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.			
Magnitude	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Significant Operation (Year 15): Low Decommissioning: Low	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Significant Operation (Year 15): Low Decommissioning: Low			
Type of Effect	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term			





Significance of Effect

Construction: Minor Not Significant
Operation (Year 1): Minor Not Significant
Operation (Year 1): with only Embedded Mitigation: Minor Not Significant
Operation (Year 15): Minor Not Significant
Operation (Year 15): Minor Not Significant
Operation (Year 15): Minor Not Significant
Operation (Year 15): Minor Not Significant
Operation (Year 15): Minor Not Significant
Operation (Year 15): Minor Not Significant
Operation (Year 15): Minor Not Significant
Operation (Year 15): Minor Not Significant
Operation (Year 15): Minor Not Significant
Operation (Year 15): Minor Not Significant
Operation (Year 15): Minor Not Significant
Operation (Year 15): Minor Not Significant
Operation (Year 15): Minor Not Significant



#### Transport Receptor - T122 / Unnamed Road, Stow

#### **Baseline Context:**

The Unnamed Road is located to the north of Thorpe le Fallows and to the southwest of Thorpe Wood. This short section of the road passes in an east west direction where it then takes a 'right-angled' turn to head south and meet with Thorpe Lane to the west of the War Memorial.

Looking in all directions towards the Cottam 1 South Site.

Distance to Cottam Sites: 0m to Cottam 1 South Site

**Nearest Viewpoint/s:** VP6, VP7 and VP11.

#### **Description of Route:**

The first section of the route (as far as the right-angled bend) passes through a large-scale arable landscape with an extensive system of fields of a varying size that take a regular pattern. Most of the fields are rectangular apart from those that abut the meandering watercourse of the River Till to the north of the route. This field system is interspersed with very few hedgerows and extends as far as the settlement edge of Sturton by Stow where the fields become larger scale and then smaller fields define the boundary of the residential areas. The second section of the route (as far as Thorpe Lane) passes through a similar system of arable fields that support very few hedgerows or tree cover, except that the outlying landscape to the west has some riparian tree cover bordering the River Till.

There is a subtle contrast between the first and second sections of the route. Both pass through an open context of geometric fields, where some are divided by low hedgerows or none at all, but the first section of the route is more open with large expanses where there are no hedgerows to each side of the road, particularly to the north side. The first section of the route also has less visibility towards the east and west due to the presence of Thorpe Wood and the meandering course of the River Till. Although there is absence of individual tree cover to either side of the route on both sections, there is relatively more hedgerow cover to the second section of the route, especially where it joins with Thorpe Lane. Although the second section of the route is set within a slightly more enclosed context there is some visibility towards the distant horizon that captures Character Area 6a and also views towards Sturton by Stow. The route is influenced by the arable fields with very few man-made interventions, other than views towards the settlements on the horizon with intervening woodland blocks.

Overall, this route offers a journey through a simple landscape with very few elements or features of interest. There are intensive levels of management within the arable farmland and so the route is influenced by the regular and geometric fields divided with few hedgerow divisions or hedgerow trees. The collection of small woodlands to the west of Brattleby are just visible in the distance to the east of the second section of route and the tree cover associated with Stow Lane is also just visible on the horizon to the west of this section also. There are some extended views where the absence of hedgerows enhances the feeling of scale, which opens up views along its length as the route approaches Fleets Road in the south. This is a quiet location (even though it is in close proximity to Sturton by Stow) with a notable absence of settlement or other busy roads. This route offers an interesting journey, but this is a route which only serves as access to the arable fields and is not a public footpath or public bridleway.

**Sensitivity:** *Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Transport Re	ansport Receptor – T122 / Unnamed Road, Stow					
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change		
	The first section of the route would not be significantly affected, as there are no construction works to each side other than a small part of the section before it takes the right-angled turn. Any oblique views towards the second section of the route would be masked by the intervening hedgerows lining the Unnamed Road (south boundary) and within the intervening field systems. The second section of the route would be significantly affected where it passes directly adjacent to the boundary of the Site/Sites. The works would be located each side of the route (east and west) for the entire section of the route. The changes to the second section of the route would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows on the east side of the route, but the west side of the route has no hedgerows and so there would be direct and open visibility of the construction works. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites at the second section of the route.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction	The foreground of the views from the route at the second section would change from the agricultural fields (to both sides of the route) to an area of panels, but they would only be set back behind the existing hedgerows to the east side and the west side would have open and expansive views of the panels. The changes would be experienced within the context of the surrounding arable fields that are in intensive use with very some simple features, with little tree cover and a limited character.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage, but the Scheme would introduce panels to the south side of the road. For details on the planting mitigation for the operation magnitude of change (Year 15), please refer to Viewpoints VP6, VP7 and VP11.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.		
Magnitude	Medium	High	Medium	Low		



Level of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term
Significance of Effect	Moderate <b>Significant</b>	Moderate-Major <b>Significant</b>	Moderate <b>Significant</b>	Minor <b>Not Significant</b>

In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
Sequential Frequent Visibility	Fabric of the Landscape
The first section of the route would not be significantly affected, as there each side other than a small part of the section before it takes the right-atowards the second section of the route would be masked by the interve	There would not be the removal of or changes in individual elements or features of the landscape within the character area.
Unnamed Road (south boundary) and within the intervening field system route would be significantly affected where it passes directly adjacent to	s. The second section of the There would be the introduction of new elements and features comprising the solar panel areas and the substation at
During the construction stage (the works) and during the operation stage appear consistently and with short time lapses between instances. Althoutravel for walkers (road users may be travelling at speed), this is an open the distances between the areas of visibility would be frequent with no gasteries.	Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements are
The foreground of the views from the route would change from the agric route) to reveal both the works during the construction stage and an area operation stage, but they would be set back from the route. The changes proximity and within the context of the surrounding arable fields with a process of the surrounding arable fields.	of panels during the would be experienced in close revailing character of There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out further detail within the following figures:
openness and distinct absence of other development or man-made feature farmsteads.	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
The works and the panel areas are in close proximity to the receptor and views from selected viewpoints VP6, VP7 and VP11 and also from areas be route takes a course from the bridleway (TLFe/31/2) to the west of Thorp Lane in the south.  Sequential Occasional Visibility The panel areas may appear with shorter time lapses between appearant	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or a different from another. The strategic major road network is defined by important historic routes and in contrast, the west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the
be moving more quickly (road users may be travelling at speed) and there the viewpoints along the route.	Overall Landscape Character and Visual Amenity
	Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are feature value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative
	visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with but form that plays a positive role in reducing the overall cumulative effects.
Construction: Low	Construction: Low
Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Significant	Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Significant
Operation (Year 15): Low	Operation (Year 15): Low
Decommissioning: Low	Decommissioning: Low





SOLAR PROJECT		
Type of	Construction: Adverse & Short Term	Construction: Adverse & Short Term
	Operation (Year 1): Adverse & Long Term	Operation (Year 1): Adverse & Long Term
	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Effect	Operation (Year 15): Neutral & Long Term	Operation (Year 15): Neutral & Long Term
	Decommissioning: Neutral & Short Term	Decommissioning: Neutral & Short Term
	Construction: Minor <b>Not Significant</b>	Construction: Minor <b>Not Significant</b>
Significance	Operation (Year 1): Minor <b>Not Significant</b>	Operation (Year 1): Minor <b>Not Significant</b>
•	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant
of Effect	Operation (Year 15): Minor <b>Not Significant</b>	Operation (Year 15): Minor <b>Not Significant</b>
	Decommissioning: Minor <b>Not Significant</b>	Decommissioning: Minor <b>Not Significant</b>



#### Transport Receptor - T127 / Thorpe Lane, Thorpe le Fallows

#### **Baseline Context:**

Thorpe Lane is located to the north of the A1500 Till Bridge Road, where it follows an east west alignment passing between the settlements of Sturton by Stow in the west and Brattleby in the east. The lane follows an east west alignment with a 'dog-leg' section where it joins with it forms a junction with a further lane known as Lowfields, which serves the settlement of Aisthorpe.

Distance to Cottam Sites: 0m to Cottam 1 South Site.

Nearest Viewpoint/s: VP4, VP5, VP6, VP7, VP8 and VP9.

#### **Description of Route:**

The first section of the route (as far as the junction with Lowfields) passes through a large-scale arable landscape with an extensive system of fields of a varying size that take a regular pattern. Most of the fields are rectangular apart from those that abut the meandering watercourse of the River Till to the west of the route. This field system is interspersed with very few hedgerows to the north of this second of the lane and these fields extend as far as Ingham Road where the fields become more irregular (and then smaller fields define the immediate edge of the River Till). To the south of this first section of the lane the field systems support a greater abundance of hedgerows with some hedgerow trees. The second section of the route (as far as Brattleby) passes through a similar system of arable fields. To the north of this section of lane, the field systems are smaller scale and there is a local collection of woodland blocks. The fields are also divided by a strong network of hedgerows with tree cover. To the south of this second section of the lane, the field system is large scale with low hedgerows and a single shelterbelt to the north of Low Farm that is the only area of tree cover in this landscape. Overall, the hedgerows support limited tree cover, except that the outlying landscape to the east has some woodland and parkland trees adjoining the settlement edge of Scampton, Aisthorpe, Brattleby and Cammeringham.

There is a contrast between the first and second sections of the route. Both pass through an open context of geometric fields, where some are divided by low hedgerows or none at all, but the first section of the route is more open with large expanses where there are no hedgerows to some parts of the route. The first section of the route also has curtailed towards the south due to the presence of the strong network of hedgerows. Thorpe Wood and the meandering course of the River Till also curtail views in a northwest direction form this first section of the route. Although there is absence of individual tree cover to either side of the route on both sections, there is relatively more hedgerow cover to the second section of the north side, which is also set in context with the small collection of woodlands to the west of Brattleby. Although the second section of the route is set within a slightly more enclosed context there is some visibility towards the distant horizon that captures Character Area 6a and also views towards Brattleby. The route is influenced by the arable fields with very few man-made interventions, other than views towards the settlements on the horizon with the strong collection of woodland blocks.

Overall, this route offers a journey through a pleasant landscape with some elements and features of interest. There are intensive levels of management within the arable farmland and so the route is influenced by the regular and geometric fields divided with few hedgerow divisions or hedgerow trees. The collection of small woodlands to the west of Brattleby are prominent features along the route and the tree cover associated with Thorpe le Fallows is also a key feature in the first section of the route. There are some extended views where the absence of hedgerows enhances the feeling of scale, which opens up views along its length as the route approaches Brattleby in the east. This is a quiet location with some passing traffic, but with a notable absence of settlement. This route offers an interesting journey, east and helps provide connectivity where the public footpath and public bridleway network is lacking in linkages. The route is also influenced by the presence of the River Till that passes beneath Thorpe Bridge at this local stopping point off the lane. The watercourse is distinguished by the presence of rusty pastures and minor concentrations of riparian tree cover on the distant skyline. There are however intensive levels of management within this arable farmland that add some decline to the natural qualities of the route.

## **Sensitivity:** *Medium* **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



of Effect

#### [Reference: EN010133/APP/C6.3.8.3.4.2.13 A] January 2023 Transport Receptor - T127 / Thorpe Lane, Thorpe le Fallows Mitigation **Operation Magnitude of Change** (Operation Magnitude of **Construction Magnitude of Change Decommissioning Magnitude** (Year 1) **Change at Year 15)** of Change The first section of the route would be significantly affected where it passes directly The foreground of the views from the Secondary mitigation such as A similar process to that of construction stage, but with the adjacent to the boundary of the Site/Sites. The second section of the route would route at the first section would change planting, and grass seeding Scheme being no longer operational. This is an assessment not be significantly affected, as there are no construction works to each side and from the agricultural fields (to the north would be taken into account at of the Site in winter but assumes retention of existing any oblique views towards the first section of the route would be masked by the vegetation and builds upon the proposed primary and side of the route) to an area of panels, but this stage, but the Scheme would intervening hedgerows lining the Thorpe Lane and within the intervening field they would be set back behind the existing introduce panels to the north secondary mitigation that had been established as the systems. The works would be located one side of the route (north only) but for two hedgerows. The changes would be side of the lane. For details on future baseline. Effects are those arising from activities for isolated sections of the route to the immediate east and west of Thorpe le Fallows. experienced within the context of the the planting mitigation for the the duration of the decommissioning to include site traffic, The changes to the first section of the route would include the construction noise and vibration from decommissioning activities, dust surrounding arable fields that are in operation magnitude of change activities during site preparation / enabling works, construction, and commissioning intensive use with very some interesting (Year 15), please refer to generation and site runoff. Viewpoints VP4, VP5, VP6, VP7, with effects such as construction traffic, noise and vibration from construction features associated with the River Till and activities, dust generation, site runoff, mud on roads, and the visual intrusion of tree cover and hedgerows add to the VP8 and VP9. plant and machinery on site. At the early stages of the construction stage, ground, character of the landscape. and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows of the route. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites at the first section of the route. Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows. These short-lived construction activities would obstruct an open and expansive proportion of the view and be a dominant feature but only for two isolated sections of the route. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south of both the first and second sections of the route. Construction Access Transport receptor will be affected by the proposed construction access into Cottam 1 South Site. **Cable Route Corridor** Transport receptor is outside of the 500m cable route corridor study area. Substation/s Transport receptor is outside of the 2km study area for Cottam 1 North substation. Medium Medium Magnitude High Low Level of Adverse & Short Term Adverse & Long Term Adverse & Long Term Neutral & Short Term **Effect** Significance Moderate **Significant** Moderate-Major Significant Moderate **Significant** Minor Not Significant

# Cottam

Transport Re	ceptor – T127 / Thorpe Lane, Thorpe le Fallows	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	Sequential Frequent Visibility	<u>Fabric of the Landscape</u>
	The first section of the route would be significantly affected where it passes directly adjacent to the boundary of the Site/Sites. The second section of the route would not be significantly affected, as there are no construction works to each side and any oblique views towards the first section of the route	There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	would be masked by the intervening hedgerows lining the Thorpe Lane and within the intervening field systems.	There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area
	During the construction stage (the works) and during the operation stage (the panel areas) would appear consistently and with short time lapses between instances. Although there is a slow speed of travel for walkers (road users may be travelling at speed), this is an open boundary and so the distances between the areas of visibility would be frequent with no gaps between.	Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
	The foreground of the views from the route would change from the agricultural fields (to both sides of the route) to reveal both the works during the construction stage and an area of panels during the operation stage, but they would be set back from the route. The changes would be experienced in close proximity and within the context of the surrounding arable fields with a prevailing character of openness and distinct absence of other development or man-made features apart from isolated	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:
	farmsteads and residential dwellings, and the edge of the settlement of Thorpe le Fallows.	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
	The works and the panel areas are in close proximity to the receptor and are clearly visible together in views from selected viewpoints VP4, VP5, VP6, VP7, VP8 and VP9 and also from areas between these	Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	viewpoints as the route takes a course from the settlement of Brattleby in the east towards Sturton by Stow in the west.	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the
	<u>Sequential Occasional Visibility</u> The panel areas may appear with shorter time lapses between appearances because the observer may be moving more quickly (road users may be travelling at speed) and there are larger distances between the viewpoints along the route.	prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative
		visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
	Construction: Low	Construction: Low
Magnitude	Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Significant	Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Not Significant
Magnitude	Operation (Year 15): Low	Operation (Year 15): Low
	Decommissioning: Low	Decommissioning: Low
	Construction: Adverse & Short Term	Construction: Adverse & Short Term
Type of	Operation (Year 1): Adverse & Long Term	Operation (Year 1): Adverse & Long Term
Effect	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
	Decommissioning: Neutral & Short Term	Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
	Construction: Minor <b>Not Significant</b>	Construction: Minor Not Significant
Significance	Operation (Year 1): Minor <b>Not Significant</b>	Operation (Year 1): Minor <b>Not Significant</b>
Significance	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant
of Effect	Operation (Year 15): Minor <b>Not Significant</b>	Operation (Year 15): Minor <b>Not Significant</b>
	Decommissioning: Minor <b>Not Significant</b>	Decommissioning: Minor <b>Not Significant</b>



#### Transport Receptor - T163 / Mainline Railway

#### **Baseline Context:**

This section of the railway passes between Gainsborough and Kirton in Linsey and then heads east towards Brigg with a final destination of Grimsby and Cleethorpes on the east coast.

Looking directly south over the Cottam 3b Site and north towards the Cottam 3a Site.

**Distance to Cottam Sites**: 0m to Cottam 3b.

Nearest Viewpoint/s: VP56, VP59 and LCC-C-S.

#### **Description of Route:**

The first section of the railway line (between Station Road and Bonsdale Lane) passes through open countryside comprising large-scale arable fields divided by hedgerows with individual and groups of trees to the south and smaller scale grassland and arable fields to the north of the line. There is a dense belt of vegetation to each side of the railway line and so the experience is that of an enclosed landscape to each side. The second section of the railway (Bonsdale Lane to Southorpe Lane) is more open to the north side with very limited areas of vegetation cover and only sections of scattered trees to the south side of the railway.

There is a marked contrast between the first section of the railway line which has smaller fields and more tree cover and the second section, which is more open with less tree cover. The route is influenced by the presence of Blyton Level Crossing, which is a feature on Bonsdale Lane along with the small woodland to the north.

There are very few extended views from the first section of the rail route due to the abundance of track side vegetation and more views from the second section of the line, which is more open and may also experience views northwest towards the Cottam 3a Site.

Overall, this route offers a pleasant journey from Gainsborough to the coastal towns of Cleethorpes and Grimsby, which are major tourist destinations for visitors from the East Midlands and South Yorkshire. This route is subject to medium levels of activity with tourists at peak times such as Bank Holidays and Weekends. This is a route where the appreciation of the view contributes to the enjoyment and quality of the journey.

**Sensitivity:** *Medium to High* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Transport Re	port Receptor – T163 / Mainline Railway					
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change		
	The second section of the route would not be significantly affected, but users of the first section would experience changes, particularly at the location where the route passes directly adjacent to the boundary of the Site/Sites. These changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of the vegetation to each side of the railway line. During the latter part of the construction stage, views would become available of the elevated activities above the line side vegetation that would provide some screening such that these activities would be confined to a filtered section of the view where the route passes directly adjacent to the boundary.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature but only to the south of the railway line. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the north of the railway line.  Construction Access Transport receptor will not be affected by the proposed construction access into the Cottam 3a and 3b Sites.	The foreground of the views from the route at this first section would change from a large agricultural field to an area of panels, but only for southern side of the railway line. The changes would be experienced within the context of open attractive views within the landscape that already supports very little development. The railway is level with the fields and so further agricultural fields beyond would be screened from the route by the panels and the distant backdrop of the scarp and dipslope at Hemswell and Willhoughton may be lost. The vertical elements in the view, including power lines, the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables would add minor cumulative changes to the view.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage, but the Scheme would introduce panels to the south side of the railway line. For details on the planting mitigation for the operation magnitude of change (Year 15), please refer to Viewpoints VP56, VP59 and LCC-C-S.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.		
Magnitude	Medium	High	Medium	Low		
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term		



Significance<br/>of EffectModerate-Major SignificantMajor SignificantModerate-Major SignificantMinor Not Significant

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	Sequential Frequent Visibility	Fabric of the Landscape	
	The second section of the route would not be significantly affected, but users of the first section would experience changes, particularly at the location where the route passes directly adjacent to the boundary of the Cottam 3b Site/Sites.	There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
	During the construction stage (the works) and during the operation stage (the panel areas) would	There would be the introduction of new elements and features comprising the solar panel areas and the substation area.	
	appear consistently and with short time lapses between instances due to the speed of the railway.	<u>Aesthetic Aspects of the Landscape</u>	
	Although the train users may be travelling at speed, this is an open boundary and so the distances between the areas of visibility would be frequent with no gaps between.	Refer to <b>Figure 8.15.1.3</b> [ <b>C6.4.8.15.1.3</b> ] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and	
	The foreground of the views from the route would change from the agricultural fields (to south side of the route) to reveal both the works during the construction stage and an area of panels during the	built form would also curtail cumulative visibility between these Site/Sites.	
	operation stage, but they would be set back from the route. The changes would be experienced in close proximity and within the context of the surrounding arable fields with a prevailing character of openness and distinct absence of other development or man-made features other than the Blyton Level	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:	
	Crossing.	Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]	
	The works and the panel areas are in close proximity to the receptor as the route takes a short course from between Station Road in the west and Blyton Level Crossing in the east.	Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive	
	Sequential Occasional Visibility  The panel areas unlikely to appear with longer time lapses between appearances because the observer will be travelling at speed with limited opportunity to appreciate the landscape.	landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.	
	Construction: Low	Construction: Low	
	Operation (Year 1): Low	Operation (Year 1): Low	
Magnitude	Operation (Year 1): with only Embedded Mitigation: Low Not Significant	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant	
	Operation (Year 15): Low	Operation (Year 15): Low	
	Decommissioning: Low Construction: Adverse & Short Term	Decommissioning: Low Construction: Adverse & Short Term	
_	Operation (Year 1): Adverse & Long Term	Operation (Year 1): Adverse & Long Term	
Type of	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	
Effect	Operation (Year 15): Neutral & Long Term	Operation (Year 15): Neutral & Long Term	
	Decommissioning: Neutral & Short Term	Decommissioning: Neutral & Short Term	
	Construction: Minor <b>Not Significant</b>	Construction: Minor Not Significant	
Significance	Operation (Year 1): Minor <b>Not Significant</b>	Operation (Year 1): Minor <b>Not Significant</b>	
Significance	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant	
of Effect	Operation (Year 15): Minor <b>Not Significant</b>	Operation (Year 15): Minor <b>Not Significant</b>	
	Decommissioning: Minor Not Significant	Decommissioning: Minor Not Significant	





#### Transport Receptor - T010 / Unnamed Road, Laughton near Gainsborough

#### **Baseline Context:**

Local track access passing between Grange Farm and Mount Pleasant Farm, near Gainsborough. The track follows a 'dog-leg' alignment to the south of Northorpe Beck, running in an almost east west direction. The track then continues (as an unnamed road) towards Park House Farm at Laughton, near Gainsborough. Open aspect along the full route with 'all-round' visibility at close range.

Distance to Cottam Sites: 144m to Cottam 3a

Nearest Viewpoint: VP66, VP67, LCC-C-W

#### **Description of Route:**

The first section of the route unnamed track which leads from the north end of Grange Farm (which sits west of Northorpe) and travels in a westerly direction towards Mount Pleasant Farm. In this section of the route, the views to the north are open and exposed due to low cut field boundary hedges within the area or where none exist. Distant views to the northwest show Laughton Woods. Views to the south and southwest (towards Cottam 3a Site and Cottam 2 Site beyond) are open in places due to the gappy hedgerows. The route then abruptly turns west to follow Northorpe Beck and heads in a northerly direction before going west once again and north up to Mount Pleasant Farm. From here it heads west following the arable field boundaries before turning north towards Park House Farm as route T6.

There is a marked contrast between the first and second sections of the route. The first section of the route is more open, having few trees and woodlands close by. The second section of the route is open in places but is contrasted by the heavy woodland setting of Laughton Wood and Dallison Plantation.

The route is influenced by the field boundary patterns and Northorpe Beck which helps influence the winding and turning of the route. The view towards the west comprises a large-scale landscape with Blyton Park Racetrack to the southwest and contrasts with the views towards the east where Northorpe Beck meanders across the landscape giving rise to varied topography and riparian woodland which gives a distinctive quality to these views.

Overall, the location depicts a balanced landscape with a strong sense of isolation and solitude away from nearby settlement. Although the landscape of Laughton Woods is hardly evident on the horizon, this track is important as east-west connectivity in the context of these woodlands and scattered tree belts. Laughton Woods is a rare and unusual feature within this part of Lincolnshire and a focus for both formal and informal recreation. The overall experience is of a very pleasant and invigorating location offering views of a rolling landscape that leads into a broad valley with east and west extended views that each depict a different character.

**Sensitivity:** *Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





## Transport Receptor - T010 / Unnamed Road, Laughton near Gainsborough

Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning
The first and middle section of the route would not be affected due to the close proximity to the Scheme, but the users of the final section of the route close to Park House Farm at Laughton would not be significantly affected. These changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow to the south of the bridleway. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the tree groups bordering the route would provide some screening such that these activities would be confined to a small section of the route where the Scheme boundary is in close proximity to the bridleway.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a narrow proportion of the view and appear as a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and west of the bridleway and unnamed Road.  Construction Access The transport receptor is not near any construction access.  Cable Route Corridor The tra	The foreground of the views from the route at the first section of the bridleway will change (Looking southwest towards the Cottam 3a Site) from agricultural fields to panels. The visibility to these areas will be limited due to the additional Shelterbelt planting and scattered trees that will block views into the Site. The changes would be experienced within the context of the Blyton Park Racing Centre that would add minor cumulative changes to the views. Further agricultural fields beyond would be screened from route by the panels and the distant backdrop of Laughton Wood may be lost. The sections of the route that leads to Park House Farm at Laughton is less likely to be affected due to the distance from the Scheme and the already enclosed nature of this section of the route. The vertical elements in the view, including power lines, the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables would add minor cumulative changes to the view.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15), refer to Viewpoints VP66, VP67 and LCC-C-W.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.





Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	in-combination Effects [cumulative sites]	Cumulative Effects [Cumulative Developments]
	No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character
		area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
Magnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
Гуре of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant



**Transport Receptor - T012 / Dring Lane, Laughton near Gainsborough** 

#### **Baseline Context:**

Minor, local lane passing between the A159 (Laughton Road) near Gainsborough and the Green Respect Burial Park. The track passes in an east west direction across a large-scale, arable landscape. Open aspect along the full route with 'all-round' visibility at close range due to absence of both roadside and field hedgerows.

Distance to Cottam Sites: 447m to Cottam 3a

Nearest Viewpoint: LCC-C-V, VP63, VP64

### **Description of Route:**

The first section of the route in the west is located at the junction of Dring Lane with A159 (Laughton Road), looking southeast towards the Cottam 3a Site with the Cottam 3b Site beyond. The view is open at the opening of Dring lane due to the open landscape and the lack of hedgerows along its route. This lane leads to Respect Woodland Green Burial Park and Alan Miles Resting Place where mature boundary vegetation closes down views to the east and to Cottam 3a Site. The route then continues east towards the racetrack beyond Northorpe Beck. A small block of woodland is visible to the north/northeast with Dallison Plantation beyond.

There is a marked contrast between the first section of the route and the final section, with a more enclosed feel to the southern area around the burial park. Views north however remain open but are curtailed by the wooded horizon.

The route is influenced by the open nature of this location with a few woodlands in the foreground and a wooded horizon to the north which breaks up the overall openness of this former airfield site. The area within the foreground is an open, simple landscape that supports intensive agriculture with few hedgerows and limited scattered hedgerow trees. The deciduous woodland blocks and woodland at Laughton Common are the nearest attractive features which add balance and a sense of scale. The route is also influenced by traffic along the A159 Laughton Road as well as the racetrack (when in use) which limits the tranquility in this area.

Overall, this route is subject to medium to low levels of traffic but offers some interesting features and views along its short length, including open views across the agricultural landscape and to its eastern edge a closed intimate setting with the woodland at the burial park being a strong alluring feature.

**Sensitivity:** *Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



# Transport Receptor - T012 / Dring Lane, Laughton near Gainsborough

	Mitigation			
	Construction	Operation (Year 1)	(Operation Year 15)	Decommissioning
	The first section of the route at the junction of Laughton Road would experience changes due to the clear and open views to the south (onto the northwestern edge of the Cottam 3a Site). Users to the final section of the route close to the burial park would not be significantly affected. These changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the existing hedgerow at the northern boundary of western corner of the Cottam 3a Site. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the distance between Dring Lane and the Scheme should provide for some difficulty for views.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation work, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a narrow proportion of the view and appear as a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the north and west of Dring Lane.	The foreground of the view from this view is unlikely to change. The changes would be experienced within the context of the Blyton Park Racing Centre that would add minor cumulative changes to the views. Further agricultural fields beyond would be screened from route by the panels and the distant backdrop of Laughton Wood may be lost. The vertical elements in the view, including power lines, the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables would add minor cumulative changes to the view.	Secondary mitigation such as planting, and grass seeding would be considered at this stage. For details on operation magnitude of change (Year 15), refer to Viewpoints LCC-C-V, VP63, VP64	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
	Construction Access The transport receptor is not near any construction access.			
	Cable Route Corridor The transport receptor is outside the 500m cable route study area.			
	Substation/s The transport receptor is within the 2km study area for the Cottam 3a substation. There are potential views of the substation.			
le	Very Low	Very Low	Low	Very Low
	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term



Significance of Effect
Negligible Not Significant
Negligible Not Significant
Negligible Not Significant
Negligible Not Significant
Negligible Not Significant

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area.
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
Magnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant



# **Transport Receptor - T013 / Laughton Road, Laughton near Gainsborough (A159)**

### **Baseline Context:**

The A159 (Gainsborough Road) near Laughton, Gainsborough that heads from Scotter in the north, passing to the east of Laughton then with a slight bend in the road, it passes towards Blyton in the south. This is a fast and open road and one of the major routes within the local area.

Distance to Cottam Sites: 69m to Cottam 3a

**Nearest Viewpoint:** VP63 / VP64 / LCC-C-V

### **Description of Route:**

This section of the road runs from Bluebell Farm to the east of Blyton, north up to Laughton Woods. The first section of the route can be seen as Gainsborough Road travelling northeast towards Blyton from Morton. The road from Morton is first Blyton Road and then it becomes Thonock Road once it crosses the railway line to the south of Blyton the road becomes Gainsborough Road. This road then meanders through Blyton and becomes Laughton Road at the junction with Kirton Road and travels north to Laughton. Gansborough Road sits to southeast of Blyton and looks east onto Cottam 3b Site and northeast towards Cottam 3a Site.

The A159 is defined by strong hedgerows which are low-cut with wide grass verges on both sides, where the hedgerow trees give some pleasant visual interest to the route (given that this is a fast section of road). Views east also show airfield and burial ground buildings scattered across the landscape beyond intervening vegetation. The shelterbelt planting surrounding the railway is prominent from this route and acts as a distinctive feature. The settlement of Blyton is prominent in the foreground of this route and brings in a lot of interest and stimulation. The route offers bland and unsettling features locally, but the wider context encapsulates the landscape to the east comprising of the Wooded Vales at Laughton. The overall experience is that of a busy road with feelings of discomfort due to the presence of the A159 but pleasant features along this busy route and varied vegetation and buffers to the road. Laughton Woods is a distinctive feature that raise the overall quality of the view and add some 'sense of place'.

The first section of the route is relatively well treed along its eastern boundary with low hedges and scattered hedgerow trees with good enclosure to the west of the route and a wide grass verge around the bend which then gives way to a more open section without hedgerows towards the entrance to Blyton Grange. However, this well-treed route creates interest and a small field pattern to this section. Travelling north, the eastern boundary of the road becomes well-treed with outgrown hedges and specimen trees forming a tall and dense boundary to much of this route. Small sections remain open and provide views across to the east with added interest and occasional views of airfield/burial ground buildings in the mid distance.

The route is influenced by the relatively open nature of the landscape with extensive woodlands to the north and west such as Laughton Wood, Dallison Plantation and Carmer Wood all being key structures in the landscape. The route is also influenced by the high vehicular activity and the key connection it offers between Laughton and Blyton as well as the remnant airfield in the east and its associated industry.

Overall, this route is subject to high levels of traffic and offers a variation of views locally along its length, including invigorating and clear open views across the landscape both east and west of Laughton Road. The existing vegetation bordering the mainline railway is also an appealing feature of the route (picked out by the overhead gantrys). This is an attractive route due to the pleasant outlook in all directions and this takes account of balance and harmony of this arable landscape made more appealing by the individual tree cover and the groups of trees in close proximity to the route.

# Sensitivity: Medium

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Transport Receptor - T013 / Laughton Road, Laughton near Gainsborough (A159)

Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning
The route would not be significantly affected due to the distance between Gainsborough Road and the Scheme. The road, when it changes to Laughton Road at Blyton would experience changes, particularly at the location where the route passes directly adjacent to the boundary of the Site/Sites. These changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Gainsborough Road. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the tree groups bordering the route would provide some screening such that these activities would be confined to a narrower section of the view where the route passes near to the Site/Sites boundary  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a narrow proportion of the view and appear as a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings of Gainsborough Road.  Construction Access The transport receptor is not near any construction access.  Cable Rout	The foreground of the views from this route will not change due to the distance between the route and the Scheme. The changes would be experienced within the context of the Blyton Park Racing Centre that would add minor cumulative changes to the views. Further agricultural fields beyond would be screened from route by the panels and the distant backdrop of Laughton Wood may be lost. The setting of Gainsborough Road as it winds down from Blyton with groups and individual trees along its verges would not be directly affected by the new panels. The vertical elements in the view, including power lines, the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables would add minor cumulative changes to the view.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15), refer to Viewpoints VP63, VP64 and VP LCC-C-V	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
e Very Low	Very Low	Low	Very Low



Type of Effect
Neutral & Short Term
Neutral & Short Term
Neutral & Short Term
Neutral & Short Term
Negligible Not Significant
Negligible Not Significant
Negligible Not Significant
Negligible Not Significant
Negligible Not Significant

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
/lagnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
ype of ffect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
ignificance f Effect	Not Applicable	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant



[Reference: EN010133/APP/C6.3.8.3.4.3.4] January 2023

# Transport Receptor - T014 / Blyton Road, Laughton near Gainsborough

#### **Baseline Context:**

This route extends from Laughton village in the northwest down to Blyton village before it joins the A159 Laughton Road and is known as the Blyton Road. There is also undulating topography which provides additional interest to this route with land falling away to the west providing a pleasant and layered scene.

Distance to Cottam Sites: 30m to Cottam 3a

Nearest Viewpoint: VP63, LCC-C-U, LCC-C-V

#### **Description of Route:**

The first section of the route can be seen heading northwest off from the Laughton Road at its junction below Blue Bell Farm. This route then extends northwest and is bordered by grass verges and dwellings as well as Grace Park Caravanning and Camping to the east of this road creating a somewhat sub-urban/commercial feel to this first section. Hedgerows to either side of the road are sparse along this section and an immature leylandii hedge can be seen to the western boundary of the Caravan Park. The route heads in a northwest direction and ends at the southern point of the Laughton settlement. The landscape along this section is very expansive and open with no roadside hedges and few trees. Looking to the west and northwest, the wooded horizon provides visual stimulation and is a dominant feature and views of Laughton church and village are possible in places. There are occasional blocks of woodland on either side of this this route creating small sections of enclosure/interest, but these are fleeting.

The majority of this route is open and exposed. Although there is some considerable long-distance interest in the woodlands to the west and north, and some scattered trees to the east, the route is predominately devoid of hedgerows and feels vast and exposed. Power lines are a detractor to the view in an otherwise nature dominant landscape. The route is influenced by the open nature of the road and the extensive views to all directions. The woodlands of Laughton Wood, Dallison Plantation and Carmer Wood help to break down the openness of the view and provides for a more appealing route. Isolated trees have visual prominence in the open landscape.

Overall, this route is subject to medium to low levels of traffic and offers a variation of views locally along its length, including invigorating and clear open views across all directions of Blyton Road. The existing woodlands to the north and west of the route are an attractive feature and provide visual stimulation. This is an attractive route due to the pleasant outlook in all directions and this takes account of balance and harmony of this arable landscape made more appealing by the individual tree cover and the groups of trees in close proximity to the route.

**Sensitivity:** *Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Transport Receptor - T014 / Blyton Road, Laughton near Gainsborough

Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning
The route would not be significantly affected due to the distance between Blyton Road and the Scheme. The road, when it changes to Laughton Road at Blyton would experience changes, particularly at the location where the route passes directly adjacent to the boundary of the Site/Sites. These changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Blyton Road. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the tree groups bordering the route would provide some screening such that these activities would be confined to a narrower section of the view where the route passes directly adjacent to the boundary.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15), refer to Viewpoints VP63, LCC-C-U and LCC-C-V.  Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15), refer to Viewpoints VP63, LCC-C-U and LCC-C-V.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.	
Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.			
These short-lived construction activities would obstruct a narrow proportion of the view and appear as a dominant eature. There would be a considerable change to the arable and use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change o the surroundings of Blyton Road.			
<b>Construction Access</b> This transport receptor is not near to construction access.			
Cable Route Corridor The transport receptor is outside the 500m cable route corridor study area			
Substation/s Partially within the 2km study area for Cottam 3a substation. The southerly half (approximate) of the road, from where it meets the A159 to the dogleg is included. Potentially there are views of the substation.			



Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
/lagnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
ype of ffect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
ignificance of Effect	Not Applicable	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant



[Reference: EN010133/APP/C6.3.8.3.4.3.5] January 2023

# Transport Receptor - T018 / Laughton Road, Blyton (A159)

### **Receptor Baseline:**

This route is along the A159, Laughton Road, passing from the junction with Kirton Road, Blyton heading north up to the Blyton Road junction which heads to Laughton. The road is mostly open along its length due to the absence bordering woodland blocks. Verge side hedgerows are well-managed and there is also undulating topography which provides additional elevation to the road at this section.

Distance to Cottam Sites: 13m to Cottam 3a

Nearest Viewpoint: VP63, LCC-C-U, LCC-C-V

### **Description of Route:**

The first section of the route can be seen as Laughton Road travelling north towards Laughton from Blyton. The road from Morton is first Blyton Road and then it becomes Thonock Road once it crosses the railway line to the south of Blyton the road becomes Gainsborough Road. This road then meanders through Blyton and becomes Laughton Road at the junction with Kirton Road and travels north to Laughton. Laughton Road sits to the north of Blyton and looks east towards Cottam 3a Site and southeast towards Cottam 3b Site.

The shelterbelt planting surrounding the railway is prominent from this route and acts as a distinctive feature. The settlement of Blyton is prominent in the foreground of this route and brings in a lot of interest and stimulation. The route offers bland and unsettling features locally, but the wider context encapsulates the landscape to the east comprising of the Wooded Vales at Laughton. The overall experience is that of a busy location with overwhelming feelings of discomfort due to the presence of the A159. But Laughton Woods and the northern edge of Blyton are distinctive features that raise the overall quality of the view and add some 'sense of place'.

The route starts within the village of Blyton and is bounded on both sides by residential dwellings and small commercial units. Once out of the village in the north, the landscape opens up with arable landscapes with glimpses of the former airfield buildings to the east and woodland to the west. The route is influenced by the presence of the settlement and isolated dwellings in this location. The route is one of the main connectivity routes between Blyton, Laughton and Scotter causing the route to be well used and busy. The landscape beyond the village comprises well/over managed hedgerows lining the wide verged road. A footway exists from Blyton to the junction with Blyton Road providing pedestrian access (albeit along this busy main road) to Laughton village. The gaps within hedgerows provide for open and scenic views to the west and the east. The presence of woodlands such as Laughton Wood, Dallison Plantation and Carmer Wood add visual prominence and helps in breaking down the vast and open scale of the views.

Overall, this route is subject to high levels of traffic and offers a variation of views locally along its length, including clear open views predominantly to the east and west of Laughton Road. The existing vegetation bordering the mainline railway is also an appealing feature of the route (picked out to the south of Blyton by the overhead gantrys). This is an attractive route due to the mix of minor settlement and the wide hedge-lined road opening out into the landscape however it has limited tranquility due to the level of traffic and its relationship with Blyton Park Racetrack.

#### **Sensitivity:** *Medium*

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Transport Receptor – T018 / Laughton Road, Blyton (A159)

Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning
The first and middle sections of the route would not be significantly affected, but users of the final section of the route would experience changes, particularly at the location where the route passes directly adjacent to the boundary of the Site/Sites. These changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Laughton Road. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the tree groups bordering the route would provide some screening such that these activities would be confined to a narrower section of the view where the route passes directly adjacent to the boundary.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a narrow proportion of the view and appear as a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings of Laughton Road.  Construction Access This transport receptor is not near to construction access.  Cable Route Corridor The transport receptor is withi	The foreground of the views from this route will not change due to the existing hedgerows trees and shelterbelts, however where the Site boundary sits close to Laughton Road, the agricultural land will become panels. The changes would be experienced within the context of the Blyton Park Racing Centre that would add minor cumulative changes to the views. Further agricultural fields beyond would be screened from route by the panels and the distant backdrop of Laughton Wood may be lost. The setting of Gainsborough Road as it winds down from Blyton with groups and individual trees along its verges would not be directly affected by the new panels. The vertical elements in the view, including power lines, the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables would add minor cumulative changes to the view.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15), refer to Viewpoints VP63, VP LCC-C-V and LCC-C-U.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traff noise and vibration from decommissioning activities, dusgeneration and site runoff.



Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area.
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a
Magnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant

[Reference: EN010133/APP/C6.3.8.3.4.3.6] January 2023

### **Transport Receptor - T025 / Bonsdale Lane, Bonsdale**

#### **Baseline Context:**

Bonsdale Lane is located to the east of Pilham and extends from the junction with Kirton Road in the north, heading south past Bonsdale Farm. The road then continues over Aisby Beck taking a 'right-angled' turn to head west meeting Green Lane. This short section of the lane extends from the southeast corner of the Cottam 3b Site down towards Green Lane.

**Distance to Cottam Sites**: 4m to Cottam 3b

Nearest Viewpoint: VP57, VP58, VP59

### **Description of Route:**

This section of the route heads from the junction with Kirton Road down to Bonsdale Farm. This route looks northwest onto Cottam 3a Site and west towards Cottam 3b Site/Sites. The route runs south directly next to the eastern boundary of Cottam 3b Site. The short section of T025 runs between the southwest corner and the PRoW just north of Bonsdale Farm. The route is a tranguil one, with no immediate settlements and only isolated dwellings and farmsteads locally. It is however influenced by the railway line and associated structures.

To the west of this route, existing mature trees form a backdrop to the landscape to the west, with a small section of woodland abutting the road and screening views to the east. Views west are open and exposed with a wooded horizon and layered field boundary landscape but low-cut hedges locally. Beyond this wooded area, the landscape becomes open to both west and easterly aspects and is vast and exposed. The route is a pleasant one with relatively little traffic and is used for recreation, joining the PRoW network locally and having reasonably wide roadside verges which create a pleasant route.

Overall, this route is subject to medium to low levels of traffic, but offers some interesting features locally along its length, including invigorating and clear open views across the landscape both north and south and east and west including views towards the distant landscape of Laughton Woods and Laughton Common. The existing vegetation bordering the mainline railway is also the appealing feature of the route (picked out by the overhead gantrys). This is an attractive route due to the pleasant outlook in all directions and this takes account of the balance and harmony of this arable landscape made more appealing by the individual tree cover and groups of trees in close proximity to the route.

**Sensitivity:** *Medium* 

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



#### **Transport Receptor - T025 / Bonsdale Lane, Bonsdale** Mitigation Construction **Operation (Year 1) Decommissioning** (Operation Year 15) The first and middle sections of the route would be affected The foreground of the views from the route at Secondary mitigation such as planting, and grass A similar process to that of construction stage, but with the due to the proximity to the Cottam 3b Site especially where the this first section would change from a large seeding would be taken into account at this stage. Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing route passes directly adjacent to the boundary. Users of the agricultural field to an area of panels but this For details on operation magnitude of change final section of the route would experience changes. These view will be mitigated by Shelterbelt planting (Year 15), refer to Viewpoints VP57, VP58 and vegetation and builds upon the proposed primary and VP59. and the reinforcement of existing hedgerows changes would include the construction activities during site secondary mitigation that had been established as the preparation / enabling works, construction, and commissioning at the eastern boundary of Cottam 3b Site. future baseline. Effects are those arising from activities for with effects such as construction traffic, noise and vibration The changes would be experienced within the the duration of the decommissioning to include site traffic, from construction activities, dust generation, site runoff, mud context of the Blyton Park Racing Centre that noise and vibration from decommissioning activities, dust on roads, and the visual intrusion of plant and machinery on would add minor cumulative changes to the generation and site runoff. site. At the early stages of the construction stage, ground, and views. Further agricultural fields beyond lower-level activities such as the construction of the solar panel would be screened from route by the panels areas and associated infrastructure and inverters would be and the distant backdrop of Laughton Wood partly screened due to the presence of foreground hedgerow may be lost. The setting of Kirton Road as it bordering Bonsdale Road. During the latter part of the winds towards Northorpe with groups and construction stage, views would become available of the individual trees along its verges would not be directly affected by the new panels. The elevated activities above the hedgerow, but the tree groups bordering the route would provide some screening such that similar small group of trees divided by Kirton Lane as it makes a small turn would however these activities would be confined to a narrower section of the view where the route passes directly adjacent to the boundary. be affected by the presence of the new panels. The vertical elements in the view, Other works would be undertaken in connection with the including power lines, the wind turbine at the construction including fencing, gates, boundary treatment and Blyton Park Racing Centre, the mainline other means of enclosure and works for the provision of railway infrastructure, telegraph poles and security and monitoring measures such as CCTV and the laying associated cables would add minor down of internal tracks. There would also be landscape and cumulative changes to the view. biodiversity mitigation works, including planting and the improvement of the foreground hedgerows. These short-lived construction activities would obstruct a narrow proportion of the view and appear as a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and east of Bonsdale Road. **Construction Access** This transport receptor is not to be used for construction access. Cable Route Corridor The transport receptor is within the 500m study area. The road runs north/south and approximately parallel to the cable route corridor. There are potential views of the route. Substation/s The transport receptor is within the 2km study area for the Cottam 3a substation. It is unlikely that there will be views of the substation due to the intervening vegetation and landform. Magnitude Very Low Very Low Low Very Low



Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Situand Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
Magnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
ype of ffect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
ignificance f Effect	Not Applicable	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant



### Transport Receptor - T028 / Green Lane, Pilham

### **Receptor Baseline:**

Green Lane is located to the southeast of Blyton and extends from the junction with Bondsdale Lane (to the south of Bonsdale Farm) towards Pilham to meet with Pilham Lane at the junction with the Church of All Saints.

Distance to Cottam Sites: 140m to Cottam 3b

Nearest Viewpoint: VP57, VP58, VP59

### **Description of Route:**

The route runs from Pilham to Bonsdale Farm in a west-east direction. The route looks north towards Cottam 3a Site and Cottam 3b Site with Cottam 3b being the closest. There are strong but low-cut hedgerows and tree clumps bordering the north and southern boundary of the route.

The route meanders after Home Farm and this section of the route has a greater number of hedgerow trees and has a more pleasant experience. The narrow lane travels through Pilham village and past the church on the left and through the village. Once opening up into countryside, the route becomes tree lined for some distance forming a natural and interesting transition from the village to the open landscape. A large part of this route is a pleasant one with relatively wide roadside verges and irregularly spaced hedgerow trees. To the eastern extents of this route, the low hedgerows are well defined but there are very few/no hedgerow trees in places creating an open and exposed landscape with little interest.

The route is influenced by the open nature of the location and the presence of several agricultural buildings standing out in the view. The cluster of trees to the north of Bonsdale Farm is an attractive feature in the context of the route. There are extended views towards the north and the south, which is the overriding feature along Green Lane (at this section) and the road continues to be defined by strong but over-managed hedgerows.

Overall, this route is subject to medium to low levels of traffic, but offers some interesting features locally along its length, including invigorating and clear open views across the landscape both north and south and east with mid distance views of a layered landscape but with distant woodland hidden by topography in the main. The well treed landscape close to the village of Pilham creates some sense of tranquility with the railway line set in the mid distance to the north.

**Sensitivity:** *Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



to the substation due to the intervening vegetation and

landform.

			rence: EN010133/APP/C6.3.8.3.4.3.7] January 2
Receptor - T028 / Green Lane, Pilham			
Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning
due to the proximity to the Cottam 3b Site especially where the route passes directly adjacent to the boundary. Users of the first section of the route would experience changes. These changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Green Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the tree groups bordering the route would provide some screening such that these activities would be confined to a narrower section of the view where the route passes directly adjacent to the boundary.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying	The foreground of the views from the route at this first section would change from a large agricultural field to an area of panels but this view will be mitigated by Shelterbelt planting and the reinforcement of existing hedgerows at the southern boundary of the Cottam 3b Site. The changes would be experienced within the context of the Blyton Park Racing Centre that would add minor cumulative changes to the views. Further agricultural fields beyond would be screened from route by the panels and the distant backdrop of Laughton Wood may be lost. The setting of Kirton Road as it winds towards Northorpe with groups and individual trees along its verges would not be directly affected by the new panels. The similar small group of trees divided by Kirton Lane as it makes a small turn would however be affected by the presence of the new panels. The vertical elements in the view, including power lines, the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables would add minor cumulative changes to the view.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15), refer to Viewpoints VP57, VP58 and VP59.	A similar process to that of construction stage, but with a Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities of the duration of the decommissioning to include site traffects and vibration from decommissioning activities, durageneration and site runoff.
These short-lived construction activities would obstruct a narrow proportion of the view and appear as a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and east of Green Lane.  Construction Access Part of the transport receptor will be used for construction access, so there will be some localized, temporary activity.			
Cable Route Corridor Part within the 500m study area. The section of this road that is within the study area is from the junction with Bonsdale Lane, approximately 190m to the east of the cable route corridor, to a point 500m west of the cable route corridor, before the road gets to Green Farm.  Substation/s The transport receptor is within the 2km study area for the Cottam 3a substation. It is unlikely that there will be any views			



Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

	In Combination Effects (Computed to City)	Completine Effects [Completine Development]
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	No Intervisibility	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Sit and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
Magnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Minor Not Significant Operation (Year 1): Minor Not SignificantOperation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant



[Reference: EN010133/APP/C6.3.8.3.4.3.8] January 2023

### Transport Receptor - T034 / Pilham Lane, Aisby near Gainsborough

### **Receptor Baseline:**

Pilham Lane is located to the north of Corringham and to the south of the small settlement of Aisby. T034 extends from Bonsdale Farm south before turning west towards Pilham Lane.

**Distance to Cottam Sites**: 203m to Cottam 2

Nearest Viewpoint: VP54, VP58, VP59

### **Description of Route:**

The first section of the route heads from Bonsdale Farm south to the junction with the unnamed road that heads south of Aisby. The second section of the route heads from Bonsdale Farm south to the junction with the unnamed road that heads south of Aisby. Lane. This route looks north/northeast onto Cottam 3a Site along its route and west towards Cottam 3b Site at its eastern extent. The route runs south next to the eastern boundary of Cottam 3b Site.

The route is influenced by the open nature of the location and the railway line to the north/west. The route is relatively low trafficked route but this is reduced somewhat by the railway and Blyton Park Racetrack when this is in use. The cluster of trees to the north of Bonsdale Farm is an attractive feature in the context of the route and can be seen from the southeast.

Along the Bonsdale Lane, views are very open in all directions with low-cut hedges to some roadside verges and other areas without hedgerows creating an open and exposed landscape. There are few hedgerow trees in places and relatively straight roads add to the somewhat bleak outlook. Travelling west along the unnamed road, again there are few trees, and the hedgerows are low cut and gappy in places continuing the character from the east. Added interest and vegetation around the settlement of Aisby creates some relief from the openness for a short stretch of this route. Further west, where the road meets Pilham Lane, the route is still rather open with little interest in the immediate setting and vast views to all aspects but with Corringham Scroggs and Duckle's wood ahead to the east creating some relief.

Overall, this route is subject to medium to low levels of traffic, but offers some interesting features locally along its length, including invigorating and clear open views across the landscape both north and south and east and west including views towards the woodland in the mid-long distance. This is a pleasant route, if somewhat exposed and is used for recreation as well as vehicular traffic.

**Sensitivity:** *Medium* 

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





# Transport Receptor - T034 / Pilham Lane, Aisby near Gainsborough

ceptor – T034 / Pilham Lane, Aisby near Gainsborough				
Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning	
The last and middle sections of the route would not be significantly affected, but users of the first section of the route would experience changes, particularly at the location where the route passes near to the boundary of the Site/Sites. These changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the presence of foreground hedgerow bordering Laughton Road. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the tree groups bordering the route would provide some screening such that these activities would be confined to a narrower section of the view where the route passes near to the boundary.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a narrow proportion of the view and appear as a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings of Pilham Lane.  Construction Access  Part of this transport receptor will be used for construction access, so there will be localised and temporary activity.  Cable Route Corrido	The foreground of the views from this route will not change due to the existing hedgerows trees and shelterbelts, however where the Site boundary sits close to Pilham Lane, the agricultural land will become panels. The changes would be experienced within the context of the Blyton Park Racing Centre that would add minor cumulative changes to the views. Further agricultural fields beyond would be screened from route by the panels and the distant backdrop of Laughton Wood may be lost. The setting of Gainsborough Road as it winds down from Blyton with groups and individual trees along its verges would not be directly affected by the new panels. The vertical elements in the view, including power lines, the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables would add minor cumulative changes to the view.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15), refer to Viewpoints VP54, VP58 and VP59.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.	



			<del>-</del>	
	The transport receptor is within the 2km study areas for Cottam 3a, Cottam 3b and Cottam 2 substations. There are potential views to the Cottam 3b and Cottam 2 substations but – due to the intervening vegetation and landform – unlikely to be any views across to Cottam 3a substation.			
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

Transport Re	ceptor – T034 / Pilham Lane, Aisby near Gainsborou	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	No Intervisibility	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.2 [C6.4.8.15.2.2]</b> which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area.
Magnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term



Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.4.3: Transport Receptors – Transport Not Significant [Reference: EN010133/APP/C6.3.8.3.4.3.8] January 2023

Significance of Effect	Not Applicable	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant
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[Reference: EN010133/APP/C6.3.8.3.4.3.9] July 2022

# **Transport Receptor - T037 / Yawthorpe Lane, Willoughton**

#### **Baseline Context:**

Yawthorpe Lane is located to the north of the A631 (Corringham Road) between the settlements of Corringham in the west and Hemswell in the east. The lane extends as far north as the Deserted Village of Dunstall (where there is no further access at this point) and begins at the junction with the Willoughton Road which runs north from the A631.

Distance to Cottam Sites: 423m to Cottam 2

Nearest Viewpoint: VP50, VP54, LCC-C-Q

### **Description of Route:**

The first section of the track extends as far as Home Farm within the settlement of Yawthorpe and is set within open arable fields to each side. There are sparse hedgerows and in many places no hedgerows at all, and few trees along this route. This allows extended views towards the east and the west which feature little woodland and very limited tree cover. There are however some blocks of woodland to the east of Yawthorpe village and one block along the western boundary of this route. The second section of the route leads from Home Farm to lower end of Yawthorpe Lane which connects the A631 to Willhoughton. Again here, hedgerows are either low cut or non-existent with very few hedgerow trees along the route creating open views across the arable farmland. Limited hedgerow trees across the landscape emphasis the large-scale landscape. The route looks west towards Cottam 2 Site, south towards Cottam 1 North Site and northwest towards Cottam 3b Site. The background noise from the A631 is prominent.

There is a subtle contrast between the first and section of the route. The first section of the route is a rough track used by agricultural machinery and pedestrians. Little woodlands and Yawthorpe Fox Covert are more prominent and easily distinguishable from this section of the route. The second section is more heavily trafficked with residential dwellings and farm buildings along the route. The lack of hedgerows and sparse tree cover either side of this group of buildings gives for a more open and uninterrupted view in all directions.

The route is influenced by the open and exposed nature of the arable fields, but the residential properties and the associated woodlands in the near distance creates a more enclosed character to some views. There are also extended views towards the south but towards the north, the existing woodlands and the residential group curtails visibility in this direction. There is open visibility directly over Cottam 2 Site due to the low height of intervening hedgerows and distinct lack of woodlands and tree cover to the west.

Overall, this route is subject to very low levels of traffic and provides local access to residential dwellings and agricultural buildings. The track offers some interesting features but there are clear open views across the landscape from east to west including views towards the distant wooded landscape. This is an ordinary route with some detracting features such as telegraph poles and wires and large-scale agricultural buildings.

**Sensitivity:** *Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





# Transport Recentor - T037 / Yawthorne Lane Willoughton

Transport Re	eceptor - T037 / Yawthorpe Lane, Willoughton			
	Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning
	The first and second sections of the route would be affected due to the proximity to the Cottam 2 Site. These changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partly screened due to the distance between the scheme and Yawthorpe Lane. During the latter part of the construction stage, views would become available of the elevated activities above the hedgerow, but the tree groups bordering the route would provide some screening such that these activities would be confined to a narrower section of the view where the route passes directly adjacent to the boundary.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a narrow proportion of the view and appear as a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the east and west of Yawthorpe Lane.  Construction Access Transport receptor will not be affected by the proposed construction access for Cottam 2 Site.  Cable Route Corridor This transport receptor is outside the 500m cable route corridor study area.  Substation/s	The foreground of the views from the route at this first section would not change but the far views to the west will change as agricultural fields will change to hold panels in the Cottam 2 Site however proposed shelterbelt planting and scattered trees should mitigate views from the route. The changes would be experienced within the context of the Blyton Park Racing Centre that would add minor cumulative changes to the views. Further agricultural fields beyond would be screened from route by the panels and the distant backdrop of Laughton Wood may be lost. The setting of Kirton Road as it winds towards Northorpe with groups and individual trees along its verges would not be directly affected by the new panels. The similar small group of trees divided by Kirton Lane as it makes a small turn would however be affected by the presence of the new panels. The vertical elements in the view, including power lines, the wind turbine at the Blyton Park Racing Centre, the mainline railway infrastructure, telegraph poles and associated cables would add minor cumulative changes to the view.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15), refer to Viewpoints VP50, VP54 and LCC-C-Q.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term



Significance of Effect
Negligible Not Significant
Negligible Not Significant
Negligible Not Significant
Negligible Not Significant
Negligible Not Significant

	In Combination Effects [Compulative Cites]	Compulative Effects [Compulative Developments]
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.
		Aesthetic Aspects of the Landscape  Refer to Figure <b>8.15.2.2 [C6.4.8.15.2.2]</b> which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character of the Unwooded Vales  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area.
Magnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant



# Transport Receptor - T038 / Field Farm Lane, Corringham

### **Baseline Context:**

'Field Farm Lane is located to the north of Corringham, west of Yawthorpe and to the south of the small settlement of Aisby. The lane extends from Corrringham in the south at the junction with East Lane and meets with Pilham Lane in the north at the small settlement of Aisby.

Distance to Cottam Sites: 256m to Cottam 2

Nearest Viewpoint: LCC-C-P, VP48 and VP53.

### **Description of Route:**

From the north, the route heads from the junction with Pilham Lane and travels south to Hall Farm. This section of the route has strong grass verges to each side to border the route and low-cut hedgerows; gappy in places, that separate the route from the surrounding agricultural fields. The route then goes from Hall Farm and travels south to form a 'T' junction with East Lane. The second section of the route is similar to the first section with the grass verges and hedgerows to either side of the route. The hedgerows to the west on this section of the route has strong shelterbelt and tree vegetation planted alongside the hedgerows to mitigate views to Old Farm and its associated agricultural fields. The route looks to the east towards Cottam 2 Site, to the north is Cottam 3b Site and to the south Cottam 1 North Site.

Open views to the north of the route give way to an area of more enclosed vegetation around Hall Farm and Old Hall before opening up a little further south. Here the boundary vegetation to the west of the road is relatively tall and dense, whilst views over to the east are more open with a low-cut hedge to this aspect.

The route is influenced by the open nature of the location and the presence of Corringham to the south and Aisby to the north. The route also follows the Corringham Beck for part of its route to the south which runs adjacent to the road. Farms and historic buildings along its route provide a break in the landscape with vegetation becoming denser towards Aisby.

Overall, this route is subject to medium to low levels of traffic, but offers some interesting features locally along its length, including invigorating and clear open views to the east including views towards the distant landscape of Yawthorpe Fox Covert. This is an attractive route due to the pleasant outlook in all directions at the first section and the partially enclosed nature of the second section of the route.

**Sensitivity:** *Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Cottam 2 and Cottam 3b substations. There are potentially

views to both the substations.

#### [Reference: EN010133/APP/C6.3.8.3.4.3.10] January 2023 **Transport Receptor - T038 / Field Farm Lane, Corringham** Mitigation Construction **Operation (Year 1) Decommissioning** (Operation Year 15) The first and second sections of the route would be affected The foreground of the views to the east from Secondary mitigation such as planting, and grass A similar process to that of construction stage, but with the due to the proximity to the Cottam 2 Site. Users of the route the route at this first section and section seeding would be taken into account at this stage. Scheme being no longer operational. This is an assessment would experience changes. These changes would include the would change from a large agricultural field to For details on operation magnitude of change of the Site in winter but assumes retention of existing construction activities during site preparation / enabling works, an area of panels but this view will be (Year 15), refer to Viewpoints VP48, VP53 and vegetation and builds upon the proposed primary and mitigated by Shelterbelt planting and the LCC-C-P. construction, and commissioning with effects such as secondary mitigation that had been established as the construction traffic, noise and vibration from construction reinforcement of existing hedgerows at the future baseline. Effects are those arising from activities for activities, dust generation, site runoff, mud on roads, and the western boundary of Cottam 2 Site. The the duration of the decommissioning to include site traffic, visual intrusion of plant and machinery on site. At the early changes would be experienced within the noise and vibration from decommissioning activities, dust stages of the construction stage, ground, and lower-level context of the Blyton Park Racing Centre that generation and site runoff. activities such as the construction of the solar panel areas and would add minor cumulative changes to the associated infrastructure and inverters would be partly views. Further agricultural fields beyond screened due to the presence of foreground hedgerow would be screened from route by the panels bordering Field Farm Lane. During the latter part of the and the distant backdrop of Laughton Wood construction stage, views would become available of the may be lost. The setting of Kirton Road as it elevated activities above the hedgerow, but the tree groups winds towards Northorpe with groups and bordering the route would provide some screening such that individual trees along its verges would not be directly affected by the new panels. The these activities would be confined to a narrower section of the view where the route passes directly adjacent to the boundary. similar small group of trees divided by Kirton Lane as it makes a small turn would however Other works would be undertaken in connection with the be affected by the presence of the new construction including fencing, gates, boundary treatment and panels. other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows. These short-lived construction activities would obstruct a narrow proportion of the view and appear as a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the east and west of Field Farm Lane. **Construction Access** The norther limit of this transport receptor is near to construction access, therefore there may be localised and temporary activity. Cable Route Corridor Approximately half of this transport receptor (the northern section) is within the 500m cabble route corridor study area, running southwards from Aisby. Substation/s The transport receptor is within the 2km study areas for



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Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.2 [C6.4.8.15.2.2]</b> which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area.
Magnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
ype of ffect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
ignificance f Effect	Not Applicable	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant





### Transport Receptor - T059 / Northlands Road, Glentworth

#### **Baseline Context:**

Northlands Road is located to the north and west of the settlement of Glentworth. This road heads northwest from the settlement towards Homeyard Farm, where it takes a 'right-angled' turn heading west, passing Northlands Cottages. The road then takes a further 'right-angled' turn heading south to meet with Kexby Road where it is at its closest to the northeastern corner of Cottam 1 North.

**Distance to Cottam Sites**: 581m to Cottam 1

Nearest Viewpoint: LCC-C-M, VP41, VP42

### **Description of Route:**

The first section of the route heads from Coachroad Hill through the built-up area within Glentworth adjacent to Glentworth Hall. This area is well treed and in keeping with a village edge landscape. Travelling north and then west away from Glentworth, the landscape becomes much more open with low-cut hedges and few hedgerow trees. Views to the north show a rolling landscape with a block of woodland in the mid-distance at Blythe Close and 'The Ridge' to the northeast. This route sits on a relatively high point and falls away to the west looking across the landscape to distant woodland and Cottam power station. This raised elevation is a pleasant feature and uncharacteristic for the route. The route Looks onto Cottam 1 North Site to the south.

The route is influenced by the open nature of the location outside the village of Glentworth to the east and Harpswell to the northeast. There are some detracting features to the east including large agricultural buildings and power lines in the close to mid-distance along this route.

Travelling west, the land falls away and the landscape becomes much more open with low cut hedges adjacent to the road, opening out in places to wide verges with no hedges and large ditches with views out across the landscape in all directions. At 'Oil Well' the route turns south where it runs down to the Kexby Road. Along this section of the route, the low hedgerows are interspersed with open areas with specimen trees spaced relatively regularly heading towards the Kexby Road. Views are a little more contained within this route in places and the road is single track and is in poor condition.

Overall, this route is subject to medium to low levels of traffic, but offers some interesting features locally along its length, including invigorating and clear open views across the landscape especially from the higher levels towards Glentworth including long range views across the valley bottom. This is an attractive route due to the pleasant outlook in all directions. The route sits comfortably within the landscape and is varied in character.

**Sensitivity:** *Medium* 

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



#### Transport Receptor - T059 / Northlands Road, Glentworth Mitigation Construction **Operation (Year 1) Decommissioning** (Operation Year 15) The first and second sections of the route are unlikely to be The foreground of the route from the first and Secondary mitigation such as planting, and grass A similar process to that of construction stage, but with the affected by any changes due to the distance from the Scheme second section is unlikely to change however Scheme being no longer operational. This is an assessment seeding would be taken into account at this stage. to the route. Users of the final section of the route would the far ground of the view in the second For details on operation magnitude of change of the Site in winter but assumes retention of existing experience changes. These changes would include the section will experience change. The (Year 15), refer to Viewpoints VP41, VP42 and vegetation and builds upon the proposed primary and LCC-C-M. construction activities during site preparation / enabling works, agricultural fields in the distance to the south secondary mitigation that had been established as the construction, and commissioning with effects such as will change to accommodate panels however future baseline. Effects are those arising from activities for construction traffic, noise and vibration from construction this will be mitigated by the proposed the duration of the decommissioning to include site traffic, activities, dust generation, site runoff, mud on roads, and the shelterbelt planting. The changes would be noise and vibration from decommissioning activities, dust generation and site runoff. experienced within the context of the Blyton visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level Park Racing Centre that would add minor activities such as the construction of the solar panel areas and cumulative changes to the views. Further associated infrastructure and inverters would be partly agricultural fields beyond would be screened screened due to the presence of foreground hedgerow from route by the panels and the distant bordering Bonsdale Road. During the latter part of the backdrop of Laughton Wood may be lost. construction stage, views would become available of the elevated activities above the hedgerow, but the tree groups bordering the route would provide some screening such that these activities would be confined to a narrower section of the view where the route passes directly adjacent to the boundary. Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows. These short-lived construction activities would obstruct a narrow proportion of the view and appear as a dominant feature. There would be a considerable change to the arable land use, but the field boundaries and the associated tree cover would remain intact. There would not be a fundamental change to the surroundings of Bonsdale Road. **Construction Access** This transport receptor is not near any construction access. **Cable Route Corridor** This transport receptor is outside the 500m cable route corridor study area. Substation/s This transport receptor is outside 2km study areas for the substations. Magnitude Very Low Very Low Low Very Low Type of Neutral & Short Term Neutral & Long Term Beneficial & Long Term Neutral & Short Term **Effect**





Significance of Effect
Negligible Not Significant
Negligible Not Significant
Negligible Not Significant
Negligible Not Significant

In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
in combination Effects [califoliative sites]	candidate Effects [candidate Sevelophicits]
No Intervisibility	Fabric of the Landscape
	There would not be the removal of or changes in individual elements or features of the landscape within the char
	area.
	There would be the introduction of new elements and features comprising the solar panel areas and the substati
	within the character area
	Aesthetic Aspects of the Landscape
	Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with th
	cumulative developments would not be experienced across the majority of the 5km study area. This is due to the
	distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlement
	built form would also curtail cumulative visibility.
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton
	Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is so
	further detail within the following figures:
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]
	Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
	Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type
	different from another. The strategic major road network is defined by important historic routes and in contrast,
	west minor road network links several historic and distinctive smaller string of settlements across the area. Over
	prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide gr
	verges and they have a major role in helping to define the quality of the landscape and reducing the visibility acr
	area.
	Overall Landscape Character and Visual Amenity
	Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of hist
	settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are fea
	value that are not highly recognised for adding intimacy and interest to the landscape. These relevant character
	the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative for the Cottom 1. Site (Sites would not alter the guarant and the landscape and its communication
	visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communication
	infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with
	form that plays a positive role in reducing the overall cumulative effects  Construction: Very Low
	Operation (Year 1): Very Low
Not Applicable	Operation (Year 1): with only Embedded Mitigation: Very Low
Τνοι Αρριιταυίο	Operation (Year 15): Low
	Decommissioning: Very Low
	Construction: Adverse & Short Term
	Operation (Year 1): Adverse & Long Term
Not Applicable	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
	Operation (Year 15): Beneficial & Long Term
	Decommissioning: Neutral & Short Term



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Significance of Effect		Construction: Negligible Not Significant
	Not Applicable	Operation (Year 1): Negligible <b>Not Significant</b>
		Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant
		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Negligible <b>Not Significant</b>



[Reference: EN010133/APP/C6.3.8.3.4.3.12] January 2023

# Transport Receptor - T064 / Kexby Road, Glentworth

#### **Baseline Context:**

Kexby Road is located to the west of the settlement of Glentworth and to the northwest of the Settlement of Fillingham. This road heads in almost east west direction (in a 'dog-leg' alignment) heading from Glentworth and extending towards Kexby and Upton to the west. Either side of the road the landscape supports several woodland blocks including Oak Wood, Larch Plantation, Turpin Wood, Ash Holt, and Fillingham Low Wood.

Distance to Cottam Sites: 474m to Cottam 1

Nearest Viewpoint: VP41 / LCC-C-M / LCC-C-N

### **Description of Route:**

The first section of the route starts on the Kexby Road to the south of the village of Glentworth. This route continues down from Hanover Hill which runs down from 'The Ridge' in the east. Heaton's wood sits to the southwest of the start of this route. The first section of this route is narrow paved road with a thick grass verge bordering the road on either side. This section of the route offers views of arable fields to the north and south but is broken up by strong woodland structures that are dotted around the route. As the route passes Glentworth village to the north, views out to the south look over low cut hedges to rolling farmland where 'The Ridge' is most evident when looking southeast along the valley sides. Travelling west, the route becomes enclosed by blocks of woodland including Nursery Plantation, again with low hedges and grass verges.

The route opens up to wide, expansive views to the west, north and south with low cut hedges and limited hedgerow trees on the northern boundary of the Kexby Road. Travelling further west, the hedgerows vary with large areas without vegetation or with limited hedgerow trees and ditches either side of the road. This continues until Ash Holt and Larch Plantation are reached and the landscape becomes much more enclosed and intimate with these large blocks of woodland creating an interesting route. Further woodlands Oak Wood, and woodlands at Westlands Farm are dotted along this route for some distance. The first section of the route also has strong, well-established hedgerows with few hedgerow trees.

The route is influenced by the open and vast, exposed nature of the landscape in places contrasted with woodland blocks to the west of this route. The route is also influenced by the settlements of Glentworth, Kexby and Upton where this road connects these minor settlements. This road also provides an important route down from 'The Ridge' and the villages beyond.

Overall, this route offers a pleasant journey that varies along its route and reflects the character of the wider landscape to the north with more open views generally to the south. There are interesting features including woodland blocks and isolated oak trees, but field boundaries are varied in quality and quantity and the landscape intensively farmed.

**Sensitivity:** *Medium* 

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



nsport Receptor – T064 / Kexby Road, Glentworth			
Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning
The first section of the route would not be significantly affected, due to the separation provided by the intervening arable fields, the presence of a consistent hedgerow network and the distance from the construction works. The users of the central and final section of the route would however experience a significant level of change particularly at the location where the route passes directly adjacent to the boundary of the Site/Sites in the final section. The changes experienced from the central and final sections of the route would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows, built form and tree cover in the central section of the route. The final section of the route would experience more open views of the construction activities. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a wide proportion of the route. The central section of the route would experience glimpsed and framed visibility of the construction works due to the presence of built form and tree cover. There would be a considerable ch	The foreground of the views from the route at both the first section would not change, in the second section however, the agricultural fields to the south of the route and north of Fillingam Grange are likely to change to host panels. Any effects to the route will be mitigate by the proposed shelterbelt planting and tree planting that will close down views to these fields. The changes would be experienced within the context of the surrounding arable fields with very few features and the route has a straight alignment with limited character.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15) refer to Viewpoints VP41, LCC-C-M and LCC-C-N.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.



Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>
Type of	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Magnitude	Very Low	Very Low	Low	Very Low
	Substation/s The transport receptor is outside the 2km study areas for the substations.			
	The western-most section of this transport receptor is within the 500m cable route corridor study area and is generally perpendicular to the cable route corridor.			

of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>		Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>	
Transport	Receptor – T064 / Kexby Road, Glentworth					
	In-Combination Effects [Cumulative Sites]		Cum	Cumulative Effects [Cumulative Developments]		
	In-Combination Effects [Cumulative Sites]  No Intervisibility		Fabric There area.  There within  Aesthe Refer to cumul distant built for the site/Si furthe  Figure Figure Figure The late differe west in prevail	would not be the removal of or changes in indi- would be the introduction of new elements and the character area  tic Aspects of the Landscape to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows to lative developments would not be experienced accepted to intervening woodlands, hedgerows, and form would also curtail cumulative visibility.  are local patches of cumulative visibility which ites and Gate Burton Energy Park, Tillbridge Sole at detail within the following figures:  8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cate 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Sola 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cate 8.1	dividual elements or features of the landscape within the character and features comprising the solar panel areas and the substation area that with the Cottam 1 Site/Sites, cumulative visibility with the diacross the majority of the 5km study area. This is due to the di tree cover between the Site/Sites. The intervening settlements and a may be focus of likely significant effects, between the Cotton 1 plar and West Burton Solar Park. This cumulative visibility is set out in Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] are Cumulative Developments Augmented ZTV [C6.3.4.15.2.9] and strategic road networks, which make one landscape type or area accordingly important historic routes and in contrast, the east distinctive smaller string of settlements across the area. Overall, the hat are often tranquil and hedged to both sides with wide grassed me the quality of the landscape and reducing the visibility across the	
			Overa settler value t the lar visibili infrast	ment with farms, nucleated villages, and small I that are not highly recognised for adding intimands andscape and land use have some ability to acco ty for the Cottam 1 Site/Sites would not alter the	munications and infrastructure is shaped by evidence of historic hamlets such as Thorpe le Fallows and Coates, which are features nacy and interest to the landscape. These relevant characteristics of ommodate change without undue adverse effects. The cumulative he overall character of the landscape and its communications and re often set within a well-vegetated context or associated with built Il cumulative effects.	



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Magnitude	Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Negligible Not Significant



## Transport Receptor - T075 / Fillingham Lane, Willingham

#### **Baseline Context:**

Fillingham Lane is located to the east of the settlement of Willingham by Stow and to the northeast of the settlement of Normanby by Stow. This lane heads east from Willingham by Stow as far as Gypsy Lane where it then joins with Willingham Road in the east. The lane broadly takes an east west alignment with some minor curves.

Distance to Cottam Sites: 0m to Cottam 1

Nearest Viewpoint: VP37 / VP40 / LCC-C-K / LCC-C-J

### **Description of Route:**

The first section of the route starts to the eastern edge of Willingham by Stow, above Willingham Surgery. The first section of the route is bordered by wide grass verges. The views to the north and south are open but relatively well contained by the small field patterns around the settlement to the south and a little more open in the north. Views out are occasionally closed down by hedgerow trees. The route is separated from the surrounding agricultural fields by strong but low-cut hedgerows. The hedgerow to the northern border of the route is set low as the grass verge slopes down, this further opens up views to the north. Views open up a little travelling east away from the village with occasional stretches of tree lined ditches and stronger vegetation to the south of this road. The route is long and straight until it reaches Moor Bridge.

The second section of the route begins to the north of Slate House Farm and travels northeast till the road curves in an 'S' shape which it then becomes Willingham Road. This section of the route is also bordered by wide grass verges with some open views to the north and south. The views are frequently broken down by well-established hedgerow trees and hedgerows that are less intensively managed to the south of the road. There are however extensive views in all directions along this route. This section of the route is bordered by Magin Moor Farm and Poplar Farm to the north. The route looks south onto Cottam 1 West Site and east to the Cottam 1 North Site, the road becoming Willingham Road at Moor Bridge.

The settlement of Willingham by Stow is a key influence within this route as most of the traffic will be vehicles travelling between Willingham by Stow and Fillingham. The route is also influenced by the several small-scale farms and residential properties along this route.

Overall, this route offers a pleasant journey that is typical in character to the wider landscape. There are interesting features including woodland blocks and isolated oak trees, but the field hedgerows are cut back in places and grown taller in the second section of the route and the arable land use is intensively managed,

**Sensitivity:** *Medium* 

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



## **Transport Receptor - T075 / Fillingham Lane, Willingham**

#### Mitigation Construction **Operation (Year 1) Decommissioning** (Operation Year 15) The route is unlikely to be affected by change due to the The foreground of the views from this route is Secondary mitigation such as planting, and grass A similar process to that of construction stage, but with the distance from the Scheme and the well-established hedgerow unlikely to change however the first section of seeding would be taken into account at this stage. Scheme being no longer operational. This is an assessment and hedgerow trees blocking views to the south. The changes the route would experience change to the For details on operation magnitude of change of the Site in winter but assumes retention of existing experienced (if any) of the route would include the construction south of the route as it looks onto the Cottam (Year 15) refer to Viewpoints VP37, VP40, LCC-Cvegetation and builds upon the proposed primary and activities during site preparation / enabling works, construction, 1 West Site, the effects of this would be secondary mitigation that had been established as the I and LCC-C-K. and commissioning with effects such as construction traffic, mitigated by the proposed shelterbelt future baseline. Effects are those arising from activities for noise and vibration from construction activities, dust planting and additional tree planting as part the duration of the decommissioning to include site traffic, generation, site runoff, mud on roads, and the visual intrusion of the Scheme. The changes would be noise and vibration from decommissioning activities, dust of plant and machinery on site. At the early stages of the experienced within the context of the generation and site runoff. construction stage, ground, and lower-level activities such as surrounding arable fields with very few the construction of the solar panel areas and associated features and the route has a straight infrastructure and inverters would be partially screened by the alignment with limited character. With the foreground hedgerows, built form and tree cover bordering the final section of the route, there would be a route. The final section of the route would experience more change from arable fields along a small open views of the construction activities. During the latter part section of the southern section of the route, but the panels would be set back from the of the construction stage, views would become available of the elevated activities and there would be open views, particularly roadside hedgerows. where the route passes directly adjacent to the boundary of the Site/Sites at the final section of the route. Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows. These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature at the final section of the route. The central section of the route would experience glimpsed and framed visibility of the construction works due to the presence of built form and tree cover. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact beyond. There would not be a fundamental change to the surroundings of the route. **Construction Access** This transport receptor is not near to construction access. Cable Route Corridor Sections of this transport recptor pass through the 500m cable route corridor study area, essentially between Slate House Farm and the junction with Gipsy Lane. Substation/s This transport receptor is within the 2km study area for the Cottam 1 substation. There are potentially views to the substation.



Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	There would be the introduction of new elements and features comprising the solar panel areas and the substation ar within the character area
	Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1</b> [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements at built form would also curtail cumulative visibility.
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out further detail within the following figures:
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or at different from another. The strategic major road network is defined by important historic routes and in contrast, the expectation was to minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
	Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with buil form that plays a positive role in reducing the overall cumulative effects.
nitude Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low



SOLAR PROJECT		
		Construction: Adverse & Short Term
Type of	Not Applicable	Operation (Year 1): Adverse & Long Term
	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Effect		Operation (Year 15): Beneficial & Long Term
		Decommissioning: Neutral & Short Term
		Construction: Negligible Not Significant
Significance	Not Applicable	Operation (Year 1): Negligible <b>Not Significant</b>
		Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant
of Effect		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Negligible <b>Not Significant</b>



[Reference: EN010133/APP/C6.3.8.3.4.3.14] January 2023

## Transport Receptor - T077 / Unnamed Road, Ingham

### **Baseline Context:**

This unnamed road (track) is located to the south of the settlement of Fillingham and to the north of the settlement of Ingham, where it takes a north south direction across the open, arable landscape.

**Distance to Cottam Sites**: 607m to Cottam 1

Nearest Viewpoint: VP28, VP31, LCC-C-F

### **Description of Route:**

The first section of the route heads south from Willingham Road and is separated from the road by a private access gate into the fields. The road is a track used for private purposes and is unpaved. The track follows the field boundaries and is open with no hedgerows and few hedgerow trees to most parts. The second section of the track then reaches the boundary of a pond set within a wooded area and heads south to join Short Lane. The pond, with its surrounding woodland stands tall in the landscape and forms the mid distant horizon from the Willingham Road at this point. Beyond, a wooded horizon ends the open arable landscape around this area where views are extensive and open. There are relatively few hedgerow trees and other features locally. Beyond the pond and woodland, along the southern part of the track, the hedgerow is to the western boundary but again has few hedgerow trees. This route looks west towards Cottam 1 North Site and southwest towards Cottam 1 South Site.

There is only a little contrast between the first and second section of the track. The first section of the track appears more open and has extensive views to the east and west. The second section of the route is equally as open but the consistency in the length of the hedgerow is a contrasting feature to the first section of the track. The pond with its associated woodland is a key feature in the landscape and helps to break up the otherwise open and flat landscape.

The route is influenced by woodland around the pond to the centre of the route which offers the only tall natural structure between Fillingham and Ingham. The route is influenced by the existing field boundaries and margins and the intensively farmed local landscape.

Overall, this route offers a pleasant but somewhat exposed journey that is typical in character to the wider arable landscape.

**Sensitivity:** *Medium* 

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





## **Transport Receptor - T077 / Unnamed Road, Ingham**

#### Mitigation Construction **Operation (Year 1) Decommissioning** (Operation Year 15) The second section of the route is not likely to be affected by The foreground of the views would not Secondary mitigation such as planting, and grass A similar process to that of construction stage, but with the construction due to the distance and already existing hedgerow change however due to the flat topography seeding would be taken into account at this stage. Scheme being no longer operational. This is an assessment planting. The first section of the route however will experience fields a bit further to the west of this route For details on operation magnitude of change of the Site in winter but assumes retention of existing slight changes due to the flat nature of the landscape, however would change from agricultural fields to vegetation and builds upon the proposed primary and (Year 15) refer to Viewpoints VP28, VP31 and due to the distance to the Scheme the effects are slim to none. panels. This however will be mitigated by the secondary mitigation that had been established as the LCC-C-F. The changes experienced from the central and final sections of proposed shelterbelt planting and additional future baseline. Effects are those arising from activities for the route would include the construction activities during site tree planting proposed as part of the Scheme. the duration of the decommissioning to include site traffic, preparation / enabling works, construction, and commissioning The changes would be experienced within the noise and vibration from decommissioning activities, dust with effects such as construction traffic, noise and vibration context of the surrounding arable fields with generation and site runoff. from construction activities, dust generation, site runoff, mud very few features and the route has a straight alignment with limited character. With the on roads, and the visual intrusion of plant and machinery on central section of the route, there would be a site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel change from arable fields along the majority areas and associated infrastructure and inverters would be of the southern section of the route, but the partially screened by the foreground hedgerows, built form and panels would be set back from the roadside tree cover in the central section of the route. The final section hedgerows. of the route would experience more open views of the construction activities. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views. Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows. These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature at the final section of the route. The central section of the route would experience glimpsed and framed visibility of the construction works due to the presence of built form and tree cover. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact beyond. There would not be a fundamental change to the surroundings to east of the route. **Construction Access** This transport receptor is not near to construction access. **Cable Route Corridor** This transport receptor is outside the 500m cable route corridor study area. Substation/s This transport receptor is outside the 2km study areas for the substations.





Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

Transport Receptor - T077 / Unnamed Road, Ingham	ansport Receptor - T077 / Unnamed Road. Ingham				
In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]				
No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character				
	area.  There would be the introduction of new elements and features comprising the solar panel areas and the substation area				
	within the character area  Aesthetic Aspects of the Landscape				
	Refer to Figure <b>8.15.2.1</b> [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.				
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:				
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]				
	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.				
	Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.				
Magnitude Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low				



COTTAM SOLAR PROJECT

30244 7400201		
		Construction: Adverse & Short Term
Type of		Operation (Year 1): Adverse & Long Term
	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Effect		Operation (Year 15): Beneficial & Long Term
		Decommissioning: Neutral & Short Term
		Construction: Negligible Not Significant
Significance	Not Applicable	Operation (Year 1): Negligible <b>Not Significant</b>
of Effect	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant
		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Negligible Not Significant



## **Transport Receptor - T078 / South Lane, Willingham**

### **Baseline Context:**

South Lane is located to the east of the settlement of Willingham by Stow and to the northeast of Normanby by Stow. The road heads south/southeast from Fillingham Lane where adjacent Magin Moor Farm and Poplar Farm. This is a straight road heading south as far as Moor Farm where it turns into an informal track.

Distance to Cottam Sites: 65m to Cottam 1

Nearest Viewpoint: VP38, LCC-C-J, LCC-C-K

### **Description of Route:**

The first section of the route heads off Fillingham Lane and travels broadly southeast past the entrance to Chestnut Manor to the east and on to Lowfield Farm and Moor Farm. The road is bounded on both sides by intensively managed low-cut hedgerows devoid of any hedgerow trees. There are relatively wide grass margins which create a rural feel and a pleasant journey. A ditch lines the western boundary of this part of the road.

The long linear woodland to the east (under Moor Bridge) is a strong feature in the landscape as it stands tall in the horizon. To the west the views are more open and occasionally broken by field boundaries and shelterbelt vegetation. Cottam power station stands tall in the far horizon to the west. Views to the east are more open and to the south, Normanby Gorse is a prominent feature of strong woodland cover in the distance. The route looks south and west directly over, and east towards the Cottam 1 North Site. This is also looking south towards the Cottam 1 South Site.

This route is influenced by the relatively open landscape to all directions but the small and tranquil road that heads south with some intimacy around the small farmsteads. Woodland blocks are a strong feature, breaking up the arable farmland. The route is a local lane and there is no major settlement close by to disrupt the tranquility which is another key influence of this route.

Overall, this route offers a pleasant journey that is typical in character to the wider arable landscape. There are interesting features including woodland blocks and isolated trees, but the field hedgerows are cut back, and the arable land use is intensively managed. This location offers some intimacy since this is a local lane with little traffic and there is no major settlement to disrupt the tranquility. The overall experience is pleasant, with some depth to views and strong contrasting features due to the presence of the plantation woodlands on the horizon and the slight undulations in topography.

### **Sensitivity:** *Medium*

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



[Reference: EN010133/APP/C6.3.8.3.4.3.15] January 202

Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning
The first section of the route would not be significantly affected, due to the separation provided by the intervening arable fields, the presence of a consistent hedgerow network and the distance from the construction works. The users of the central and final section of the route would however experience a significant level of change particularly at the location where the route passes directly adjacent to the boundary of the Site/Sites in the final section. The changes experienced from the central and final sections of the route would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows, built form and tree cover in the central section of the route. The final section of the route would experience more open views of the construction activities. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites at the final section of the route.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature at the final section of the route. The cen	The foreground of the views from the route at the final section would change from a large agricultural field (to both sides of the route) to an area of panels, but only for a short straight section of the route. The changes would be experienced within the context of the surrounding arable fields with very few features and the route has a straight alignment with limited character. With the central section of the route, there would be a change from arable fields along most of the southern section of the route, but the panels would be set back from the roadside hedgerows. The northern section of the central part of the route would not experience any changes.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15) refer to Viewpoints VP38, LCC-C-J and LCC-C-K.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.



	This transport receptor is within the 500m cable route corridor study area and crosses the cable route corridor at Lowfield Farm.			
	Substation/s This transport receptor is within the 2km study area for Cottam 1 substation. There are potentially views of the substation.			
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

of Effect	Negligible Not Significant	Negligible Not Significant	Willion-Would ate Not Significant	Negligible Not Significant			
Transport R	Transport Receptor - T078 / South Lane, Willingham						
	In-Combination Effects [Cumulative Sites]	Cumu	Cumulative Effects [Cumulative Developments]				
	No Intervisibility		would be the introduction of new elements and features the character area  ic Aspects of the Landscape or Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the active developments would not be experienced across the center of the intervening woodlands, hedgerows, and tree covers would also curtail cumulative visibility.  The local patches of cumulative visibility which may be forced and Gate Burton Energy Park, Tillbridge Solar and West detail within the following figures:  8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative 9.  In from another. The strategic major road network is decinior road network links several historic and distinctive solar road network is formed by narrow lanes that are ofte and they have a major role in helping to define the quality 1.  Landscape Character and Visual Amenity 1.  In the character of the landscape and the communication ment with farms, nucleated villages, and small hamlets so that are not highly recognised for adding intimacy and in dscape and land use have some ability to accommodate by for the Cottam 1. Site/Sites would not alter the overall of the cottam 1.	e majority of the 5km study area. This is due to the er between the Site/Sites. The intervening settlements and ocus of likely significant effects, between the Cotton 1 est Burton Solar Park. This cumulative visibility is set out in the Developments Augmented ZTV [C6.4.8.15.2.6] tive Developments Augmented ZTV [C6.4.8.15.2.8] e Developments Augmented ZTV [C6.3.4.15.2.9] gic road networks, which make one landscape type or area effined by important historic routes and in contrast, the east smaller string of settlements across the area. Overall, the ten tranquil and hedged to both sides with wide grassed lity of the landscape and reducing the visibility across the area to the landscape. These relevant characteristics of e change without undue adverse effects. The cumulative character of the landscape and its communications and t within a well-vegetated context or associated with built			





SOLAR PROJECT		
		Construction: Very Low
	I NOT Applicable	Operation (Year 1): Very Low
Magnitude		Operation (Year 1): with only Embedded Mitigation: Very Low
		Operation (Year 15): Low
		Decommissioning: Very Low
		Construction: Adverse & Short Term
Type of	Not Applicable	Operation (Year 1): Adverse & Long Term
		Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Effect		Operation (Year 15): Beneficial & Long Term
		Decommissioning: Neutral & Short Term
		Construction: Negligible Not Significant
Significance	Niet Auglieghie	Operation (Year 1): Negligible Not Significant
_	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant
of Effect		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning Negligible Not Significant



## **Transport Receptor - T083 / Cot Garth Lane**

### **Baseline Context:**

Cot Garth Lane is located within the settlement of Willingham by Stow at its southern edge. This is a straight section of lane that passes from the B1241 (Stow Road) in the west to meet with Stone Pit Lane in the east. The lane crosses a minor tributary of the River Till to the west of Woods Farm and the lane has limited visibility towards the Site/Sites.

Distance to Cottam Sites: 37m to Cottam 1

Nearest Viewpoint: VP39, VP40, LCC-C-K

### **Description of Route:**

The first section of the route emerges east from a 'T' junction with B1241 to the south of the settlement Willingham by Stow. This section of the route is bordered with wide grass verges and very strong hedgerows to both sides. The hedgerows are grown tall which minimizes views to the north and south. The first part of this route as it travels through the village has a village character with more mixed species and formalised garden hedges as well as a greater mix of mature garden and orchard trees. This character stretches to Grange Farm where the landscape then becomes more agricultural with a mix of pasture and arable fields.

The hedgerow trees along this section of the route are mature and well established which creates an additional barrier between the route and its surrounding agricultural fields and residential properties. The road then crosses over a small watercourse. In the second section of this route the landscape gently rises east. The hedgerows bordering the route are tall and strong being less intensively managed than the majority in the surrounding landscape. There are few hedgerow trees. There are a few gaps in the hedgerow for access gates to the agricultural fields and these are what provides for a few pockets of open views in an otherwise intimate route. Cot Garth Lane then finally ends and forms a 'T' junction with Stone Pit Lane where the views to the east are extensive. The majority of the lane looks south towards Cottam 1 West Site but the final section of the route that comes onto Stone Pit Lane overlooks Cottam 1 West Site directly to the east, but all views are limited by topography and vegetation.

Overall, the intimate and tranquil nature of the setting is a key influence in this route as is the varied settlement vegetation and architecture to the western section. The route is a local lane used by residents and experiences very little traffic. Overall, this route offers a pleasant journey that is far more intimate than the wider arable landscape.

**Sensitivity:** *Medium* 

## **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

due to the separation provided by the intervening arable fields, the presence of a consistent hedgerow network and the distinguished from the construction works. The users of the final section of the route would however separence as light level of change particularly at the location where the route passes directly adjacent to the boundary of the Sites/Sites in the final section. The changes experience of slight is the properties of the construction activities during step paraticularly at the construction activities and as the construction activities and as a term of passes of the construction activities, observed with the context of the paratile final section of the route. The changes experience of the paratile final section of the route. The changes experience of the paratile final section of the route would not experience divisiting that that a distribution of plant and machinery on site. At the early stages of the construction activities, dust generation, site numbers of plant and machinery on site. At the early stages of the construction activities of the site of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows. Built form and tree cover in the central and first section of the route.  The changes experience slight inverted the construction activities, dust generation and site of the construction activities of the site of the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows. Built form and tree cover in the central and first section of the route.  The construction activities and a site of the construction activities and the route.  The construction activities are the site of the construction activities and the improvement of the foreground hedgerows. Built form and the improvement of the foreground hedgerows. Built form and the management of the course would be construction activities would also be landscape and biological partial partial partial pa	ort Receptor – T083 / Cot Garth Lane					
due to the separation provided by the intervening arable fields, the presence of a consistent hedgerow network and the distinguished from the construction works. The users of the final section of the route would however separence as light level of change particularly at the location where the route passes directly adjacent to the boundary of the Sites/Sites in the final section. The changes experience of slight is the properties of the construction activities during step paraticularly at the construction activities and as the construction activities and as a term of passes of the construction activities, observed with the context of the paratile final section of the route. The changes experience of the paratile final section of the route. The changes experience of the paratile final section of the route would not experience divisiting that that a distribution of plant and machinery on site. At the early stages of the construction activities, dust generation, site numbers of plant and machinery on site. At the early stages of the construction activities of the site of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows. Built form and tree cover in the central and first section of the route.  The changes experience slight inverted the construction activities, dust generation and site of the construction activities of the site of the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows. Built form and tree cover in the central and first section of the route.  The construction activities and a site of the construction activities and the route.  The construction activities are the site of the construction activities and the improvement of the foreground hedgerows. Built form and the improvement of the foreground hedgerows. Built form and the management of the course would be construction activities would also be landscape and biological partial partial partial pa	Construction	Operation (Year 1)	_	Decommissioning		
works due to the presence of built form and tree cover. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain	due to the separation provided by the intervening arable fields, the presence of a consistent hedgerow network and the distance from the construction works. The users of the final section of the route would however experience a slight level of change particularly at the location where the route passes directly adjacent to the boundary of the Site/Sites in the final section. The changes experienced from final section of the route would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows, built form and tree cover in the central and first section of the route. The final section of the route would experience more open views of the construction activities. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites at the final section of the route.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature at the final section of the route. The central section of the route would experience glimpsed and framed visibility of the constructio	the final section would change from a large agricultural field (east of Stone Pit Lane) to an area of panels, but only for a short straight section of the route. The changes would be experienced within the context of the surrounding arable fields with very few features and the route has a straight alignment with limited character. The majority of the route would not experience change due to the existing strong and tall hedgerows at the	seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15) refer to ViewpointsVP39, VP40 and LCC-C-	mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of th decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site		



	Battery Storage will be unobstructed and will provide temporary visual disturbance throughout the construction stage.  Cable Route Corridor This transport receptor is outside the 500m study area.			
	Substation/s This transport receptor is within the 2km study area for Cottam 1 substation. There are potentially views of the substation.			
Magnitude	Medium	Medium	Low	Very Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Moderate Significant	Moderate <b>Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>



Transport Receptor - T083 / Cot Garth Lane

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
Magnitude	Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Negligible Not Significant



# Transport Receptor - T084 / Unnamed Road, Coates by Stow

#### **Baseline Context:**

Unnamed road to the north of the small settlement of Coates and east of the settlement of Willingham by Stow. This is a north south aligned section of road with some wide 'dog-legs' that follow field boundaries and water courses. The lane passes from the small settlement of Coates in the south to meet with Willingham Road in the north and provides access to Turpin Farm and Grange Farm. The southern section of the road is distanced form the Cottam 1 North Site/Sites by intervening hedgerows and woodland cover, but the northern section passes directly through the Site/Sites.

Distance to Cottam Sites: 0m to Cottam 1

Nearest Viewpoint: VP18, VP37, LCC-C-I

### **Description of Route:**

The first section of the route extends south from Willingham Road through the western side of Turpin Farm. The route itself is a track that runs along the boundaries of fields. The track is unmade and not a public access route. There is a row of poplar to the western boundary of the first part of this route and relatively strong vegetation around the farm but open views across the surrounding countryside, nevertheless. The views are broken up by the blocks of woodland in the surrounding area such as New plantation, Larch plantation and Fox Covert. The first section of the route comes down to the top line of New plantation. Here the route goes west and back down south towards Grange Farm. The first section of the route looks east and westward to Cottam 1 North Sites.

There is little to no marked contrast between the first and second section of the route. The tall woodlands of New Plantation and Fox Covert are strong features in the landscape and helps to close down the extensive and vast views across the landscape. The tall Linear woodland to the south of Moor Bridge is a strong feature in the landscape and closes down views to the west at the first section of the route. The route is not well used and experiences no public traffic.

The route is influenced by the open views in the landscape and the productive arable nature of the surrounding landscape. The woodlands in the distance help to contain the views but the open nature of the immediate foreground provides for an interesting and stimulating route.

Overall, this route offers a pleasant journey that is typical in character to the wider arable landscape. There are interesting features including woodland blocks and isolated trees, but the field hedgerows are cut back, and the arable land use is intensively managed,

**Sensitivity:** *Medium* 

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Transport Re	ort Receptor – T084 / Unnamed Road, Coates by Stow			
	Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning
	The route would not be significantly affected by the construction. The changes experienced from the route (if any) would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows, built form and tree cover in the central section of the route. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites at the first section of the route.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and	The foreground of the views from the route at the final section would change from a large agricultural field (to both sides of the route) to an area of panels, but only for a short straight section of the route. The changes would be experienced within the context of the surrounding arable fields with very few features and the route has a straight alignment with limited character. With the central section of the route, there would be a change from arable fields along the majority of the southern section of the route, but the panels would be set back from the roadside hedgerows.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15) refer to Viewpoints VP18, VP37 and LCC-C-I.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
	other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.			
	These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature at the final section of the route. The first section of the route would experience glimpsed and framed visibility of the construction works due to the presence of built form and tree cover. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact beyond. There would not be a fundamental change to the surroundings of this Road.			
	Construction Access Part of this landscape receptor might be used as construction access, so there could be localised and temporary activity.			
	Cable Route Corridor This transport receptor is outside the 500m cable route corridor study area.			
	Substation/s This transport receptor is partially within the 2km study area for Cottam 1 substation. The road's line takes it in and out of the study area around a short segment of its extent. There are potentially views to the substation.			
Magnitude	Very Low	Very Low	Low	Very Low





Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
communication arrests [continuous of cost	camalative Ericete [camalative bevelopments]
No Intervisibility	Fabric of the Landscape
	There would not be the removal of or changes in individual elements or features of the landscape within the charac
	area.
	There would be the introduction of new elements and features comprising the solar panel areas and the substatio
	within the character area
	Aesthetic Aspects of the Landscape
	Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the
	cumulative developments would not be experienced across the majority of the 5km study area. This is due to the
	distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlemen
	built form would also curtail cumulative visibility.
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton
	Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set
	further detail within the following figures:
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]
	Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
	Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type o
	different from another. The strategic major road network is defined by important historic routes and in contrast, t
	west minor road network links several historic and distinctive smaller string of settlements across the area. Overal
	prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide gras
	verges and they have a major role in helping to define the quality of the landscape and reducing the visibility acros
	area.
	Overall Landscape Character and Visual Amenity
	Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of history
	settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are feating intimacy, and interest to the landscape. These relevant sharesteris
	value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characterist the landscape and land use have some ability to accommodate change without undue adverse effects. The cumula
	visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications
	infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with
	form that plays a positive role in reducing the overall cumulative effects
	Construction: Very Low
Not Applicable	Operation (Year 1): Very Low
de Not Applicable	Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low
	Decommissioning: Very Low





Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Negligible Not Significant



## Transport Receptor - T085 / Stone Pit Lane, Willingham by Stow

#### **Baseline Context:**

Stone Pit Lane is located to the east of the settlement of Willingham by Stow and to the northeast of the settlement of Normanby by Stow. The lane follows a straight alignment that passes north south from Fillingham Lane, passing the junction with Cot Garth Lane. The road has 'no through' access at the junction with the River Till.

Distance to Cottam Sites: 5m to Cottam 1

Nearest Viewpoint: VP39, VP40, LCC-C-K

### **Description of Route:**

The first section of the route emerges south from Fillingham Lane to the east of Willingham by Stow settlement and travels straight to a junction with Cot Garth Lane. The second section of Stone pit Lane continues south past Woods Farm and reaches a dead end within an agricultural field. The first section of the route has grass verges to either side of the route and well-established, relatively tall hedgerows. These strong hedgerows close down any views to the east and west. The presence of tall hedgerow trees further limit views and gives this section of the route an enclosed and intimate feel. Towards the end of the first section of the route, at the junction with Cot Garth Lane the hedgerows to the east open up abruptly and grant open views to the agricultural fields to the east and southeast directions. The second section of the route continues on to a dead end, but the hedgerows and the hedgerow trees are strong and relatively tall, limiting views in all directions. Land to the west is more intimate with grazing fields and strong field boundaries whilst the arable landscape to the east is more open. The route looks southeast and south towards Cottam 1 West Site and looks directly east towards Cottam 1 North Site.

The tall hedgerows and well-established hedgerow trees add to the intimate setting of this lane. This is a local lane network with little to no traffic. There are no major settlements in the immediate vicinity to disrupt the tranquility of this location. The view is influenced by the intimate setting that the tall hedgerows and vegetation provide for the route. Normanby Gorse is a strong woodland feature to the southeast where breaks in vegetation permit views.

Overall, this route offers a pleasant journey that is less typical in character to the wider arable landscape. There are interesting features including woodland blocks and isolated trees, the intensive levels of management and the stockpiling of materials add decline to the natural qualities of the view.

**Sensitivity:** *Medium* 

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning
in the final section. The changes experienced from the central and final sections of the route would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and	The foreground of the views in the first and final section of the route would not change. The middle section of the route is likely to change as the agricultural fields to the southeast change to panels, this change should be mitigated by proposed Shelterbelts and additional tree planting as part of the Scheme. The changes would be experienced within the context of the surrounding arable fields with very few features and the route has a straight alignment with limited character. With the central section of the route, there would be a change from arable fields along the majority of the southern section of the route, but the panels would be set back from the roadside hedgerows.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15) refer to Viewpoints VP39, VP40 and LCC-C-k.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessme of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site trafficulties and vibration from decommissioning activities, dust generation and site runoff.



	Transport receptor is within the 2km study area of Cottam 1 North substation.			
Magnitude	Medium	Medium	Low	Very Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Moderate Significant	Moderate Significant	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

Transport Receptor - T085 / Stone Pit Lane, Willingham by Stow	
In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]



	No Intervisibility	<u>Fabric of the Landscape</u>
		There would not be the removal of or changes in individual elements or features of the landscape within the character
		area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area
		within the character area
		Aesthetic Aspects of the Landscape
		Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the
		cumulative developments would not be experienced across the majority of the 5km study area. This is due to the
		distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and
		built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1
		Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in
		further detail within the following figures:
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
		Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area
		different from another. The strategic major road network is defined by important historic routes and in contrast, the east
		west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the
		prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed
		verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the
		area.
		Overall Landscape Character and Visual Amenity
		Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic
		settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features
		value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of
		the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative
		visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and
		infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built
		form that plays a positive role in reducing the overall cumulative effects.
		Construction: Very Low
	Not Applicable	Operation (Year 1): Very Low
Magnitude		Operation (Year 1): with only Embedded Mitigation: Very Low
		Operation (Year 15): Low
		Decommissioning: Very Low
		Construction: Adverse & Short Term
Type of	Not Applicable	Operation (Year 1): Adverse & Long Term
Effect		Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
		Operation (Year 15): Beneficial & Long Term
		Decommissioning: Neutral & Short Term
		Construction: Negligible Not Significant
Significance	Not Applicable	Operation (Year 1): Negligible <b>Not Significant</b>
of Effect		Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant
3. 1		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Negligible <b>Not Significant</b>



[Reference: EN010133/APP/C6.3.8.3.4.3.19] January 2023

# Transport Receptor - T094 / Track between South Lane and Coates Lane, Willingham

### **Baseline Context:**

The track is located to the west of the small settlement of Coates, passing to the east of a large irregular woodland block known as Normanby Gorse. The track takes a meandering alignment in a north south direction from Coates in the south to meet with South Lane in the north at Moor Farm. The track is labelled South Lane on some maps.

**Distance to Cottam Sites**: 178m to Cottam 1

Nearest Viewpoint: VP18, VP19, VP38

## **Description of Route:**

The first section of the route emerges from the southern end of the metalled road of South Lane and proceeds to travel south to the northeast corner of Normanby Gorse. From here the second section of the route takes the track from Normanby Gorse to meet Coates Lane. To the first section of route the vegetation surrounding the track is similar to that of South Lane. The track is bordered by wide grass verges with hedgerows predominantly to the western edge only. The hedgerows are low cut allowing extensive views to the east and west. The section of the route beyond Normanby Gorse is completely open with no presence of hedgerows to border the track. There is however a strong field boundary further east of this route somewhat breaking up views to the east The end of the route has an access gate as it joins onto Coates Lane. The route looks east onto Cottam 1 West Site and east onto Cottam 1 North Site.

The route is influenced by the open nature of the views and low-cut vegetation surrounding the route is influenced by Normanby Gorse which is a strong feature in the landscape and helps to close down views to the south and west from parts of this route.

Overall, this route offers a pleasant journey that is typical in character to the wider open arable landscape. There are interesting features including woodland blocks and isolated trees, but the field hedgerows are cut back, and the arable land use is intensively managed.

### **Sensitivity:** *Medium*

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





# Transport Receptor - T094 / Track between South Lane and Coates Lane, Willingham

#### Mitigation Construction **Operation (Year 1) Decommissioning** (Operation Year 15) The route would not be significantly affected, due to the The foreground of the views from the route at Secondary mitigation such as planting, and grass A similar process to that of construction stage, but with the separation provided by the intervening arable fields, the the first section to the west would change seeding would be taken into account at this stage. Scheme being no longer operational. This is an assessment presence of a consistent hedgerow network and the distance from a large agricultural field to an area of For details on operation magnitude of change of the Site in winter but assumes retention of existing from the construction works. The users of the route would panels, but only for a short straight section of (Year 15) refer to Viewpoints VP18, VP19 and vegetation and builds upon the proposed primary and however experience a slight level of change particularly at the the route and would be mitigated by the secondary mitigation that had been established as the VP38. location where the route passes directly adjacent to the proposed shelterbelts and additional tree future baseline. Effects are those arising from activities for boundary of the Site/Sites in the first section. The changes planting as part of the Scheme. The changes the duration of the decommissioning to include site traffic, experienced from the first section of the route would include would be experienced within the context of noise and vibration from decommissioning activities, dust the construction activities during site preparation / enabling the surrounding arable fields with very few generation and site runoff. works, construction, and commissioning with effects such as features and the route has a straight construction traffic, noise and vibration from construction alignment with limited character. With the activities, dust generation, site runoff, mud on roads, and the central section of the route, there would be a visual intrusion of plant and machinery on site. At the early change from arable fields along the majority of the northern section of the route, but the stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and panels would be set back from the roadside associated infrastructure and inverters would be partially hedgerows. screened by the foreground hedgerows, built form and tree cover in the first section of the route. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites at the first section of the route. Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows. These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature at the final section of the route. The central section of the route would experience glimpsed and framed visibility of the construction works due to the presence of built form and tree cover. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact beyond. There would not be a fundamental change to the surroundings to the east of the route between Moor Farm and Normanby Gorse. **Construction Access** The transport receptor is adjacent to the sites of panels and therefore they might be access activity. Cable Route Corridor The transport receptor is partially within the 500m cable route corridor study area, from where the cable route crosses at Lowfield and Moor Farms southwards to the edge of Normanby Gorse.



	Substation/s The transport receptor is within the 2km study area for the Cottam 1 substation. There are potentially views to the substation.			
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
No Intervisibility	Fabric of the Landscape
	There would not be the removal of or changes in individual elements or features of the landscape within the character
	area.
	There would be the introduction of new elements and features comprising the solar panel areas and the substation a
	within the character area
	Aesthetic Aspects of the Landscape
	Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the
	cumulative developments would not be experienced across the majority of the 5km study area. This is due to the
	distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements built form would also curtail cumulative visibility.
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1
	Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set of
	further detail within the following figures:
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]
	Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
	Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or
	different from another. The strategic major road network is defined by important historic routes and in contrast, th
	west minor road network links several historic and distinctive smaller string of settlements across the area. Overall,
	prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grass
	verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across area.
	alea.
	Overall Landscape Character and Visual Amenity
	Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of histori
	settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are feature
	value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristic
	the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulat visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications a
	infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with b
	form that plays a positive role in reducing the overall cumulative effects
	Construction: Very Low
Not Applicable	Operation (Year 1): Very Low
	Operation (Year 1): with only Embedded Mitigation: Very Low
	Operation (Year 15): Low





Cottam		Appendix 8.3.4.3: Transport Receptors – Transport Not Significant
SOLAR PROJECT		[Reference: EN010133/APP/C6.3.8.3.4.3.19] January 2023
		Decommissioning: Very Low
		Construction: Adverse & Short Term
Type of	Not Applicable	Operation (Year 1): Adverse & Long Term
		Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Effect		Operation (Year 15): Beneficial & Long Term
		Decommissioning: Neutral & Short Term
		Construction: Negligible Not Significant
Significance	Not Applicable	Operation (Year 1): Negligible Not Significant
of Effect		Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant
		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Negligible <b>Not Significant</b>



[Reference: EN010133/APP/C6.3.8.3.4.3.20] January 2023

## Transport Receptor - T096 / Coates Lane, Coates by Stow

#### **Baseline Context:**

Coates Lane is located to the east of Normanby by Stow and passes through the small settlement of Coates. The lane exits Coates at Grange Farm and passes west to meet with the green lane and bridge crossing over the River Till. The lane follows an east west alignment with a 'dog-leg' section to the west of Hall Farm.

Distance to Cottam Sites: 0m to Cottam 1

Nearest Viewpoint: VP17, VP18, VP19.

### **Description of Route:**

The first section of the route starts from a crossing on top of the River Till to the east of B1241. This route then travels east following the influence of field boundaries and meets a junction with a track that leads to South Lane. The second section of the route travels through Coates and ends just west of Grange Farm. The first section of the route has strong vegetation where it runs adjacent to the River Till but as it reaches the length closest to Normanby Gorse the treed landscape opens out to managed hedgerow with some limited hedgerow trees. There is a strong field boundary to the east of Normanby Gorse which limits views across to the east from this route. Vegetation around the settlement of Coates is much more prolific and creates a more intimate feel with blocks of woodland and wooded areas around existing buildings. This route travels through Cottam 1 West Site, looking north, south, west, and east and southeast towards Cottam 1 South Site and northwest onto Cottam 1 North Site.

The River Till is a key influence of the route in the first section of the route and the settlement of Coates and Grange Farm is a key influence in the second half of the route. The tall and dense vegetation surrounding the River Till is a distinctive feature in the view and creates a riparian character that follows its meandering course. A strong line of poplar to the east of this route beyond Coates is a prominent feature across the wider landscape with other woodland blocks scattered to the north, northeast and southeast of this route.

Overall, this route offers a pleasant journey that is typical in character to the wider context of the landscape. The overall impression is that of a simple, calm, and muted landscape with some pleasant views.

**Sensitivity:** *Medium* 

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





## Transport Receptor - T096 / Coates Lane, Coates by Stow

Substation/s

#### Mitigation Construction **Operation (Year 1) Decommissioning** (Operation Year 15) The first section of the route would be affected where it passes The foreground of the views from the route at Secondary mitigation such as planting, and grass A similar process to that of construction stage, but with the directly adjacent to the boundary of the Site/Sites. The the first section would change from the seeding would be taken into account at this stage. Scheme being no longer operational. This is an assessment construction works would be located on both sides of the first agricultural fields (to the south side of the For details on operation magnitude of change of the Site in winter but assumes retention of existing section of the route closest to the River Till. The second section route) to an area of panels, but they would be vegetation and builds upon the proposed primary and (Year 15), refer to Viewpoints VP17, VP18 and of the route would not be affected, as there are no works to set back behind the existing hedgerows. The secondary mitigation that had been established as the VP19. each side and oblique views towards the first section of the changes would be experienced within the future baseline. Effects are those arising from activities for route would be masked by the intervening hedgerows. The context of the surrounding arable fields with a the duration of the decommissioning to include site traffic, changes to the first section of the route would include the prevailing character of openness and distinct noise and vibration from decommissioning activities, dust construction activities during site preparation / enabling works, absence of features. generation and site runoff. construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows and tree cover. The first section of the route would experience more open views of the construction activities. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites at the first section of the route. Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows. These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature at the first section of the route. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the north and south of the second section of the route. **Construction Access** The transport receptor is adjacent to the sites of panels and therefore they might be access activity. Cable Route Corridor The transport receptor is outside the 500m cable route corridor study area, though the far western limit touches the extent of the 500m line.





	The transport receptor is largely within the 2km study area for the Cottam 1 substation, with the eastern section from St Edith's Church being outside. There are potentially views of the substation.			
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

ceptor – T096 / Coates Lane, Coates by Stow	
In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
No Intervisibility	There would not be the removal of or changes in individual elements or features of the landscape within the area.
	There would be the introduction of new elements and features comprising the solar panel areas and the su within the character area
	Aesthetic Aspects of the Landscape  Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility we cumulative developments would not be experienced across the majority of the 5km study area. This is due distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening see built form would also curtail cumulative visibility.
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibili further detail within the following figures:
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2 Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.1 Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2
	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape different from another. The strategic major road network is defined by important historic routes and in corwest minor road network links several historic and distinctive smaller string of settlements across the area. prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with w verges and they have a major role in helping to define the quality of the landscape and reducing the visibili area.
	Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which a value that are not highly recognised for adding intimacy and interest to the landscape. These relevant character landscape and land use have some ability to accommodate change without undue adverse effects. The visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communication infrastructure features. Moreover, these features are often set within a well-vegetated context or associated form that plays a positive role in reducing the overall cumulative effects.





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		Construction: Very Low Operation (Year 1): Very Low	
	Not Applicable		
Magnitude	••	Operation (Year 1): with only Embedded Mitigation: Very Low	
		Operation (Year 15): Low	
		Decommissioning: Very Low	
Type of		Construction: Adverse & Short Term	
	Not Applicable	Operation (Year 1): Adverse & Long Term	
		Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	
Effect		Operation (Year 15): Beneficial & Long Term	
		Decommissioning: Neutral & Short Term	
		Construction: Negligible Not Significant	
Significance	Not Applicable	Operation (Year 1): Negligible <b>Not Significant</b>	
		Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant	
of Effect		Operation (Year 15): Minor <b>Not Significant</b>	
		Decommissioning: Negligible Not Significant	





## Transport Receptor - T097 / Normanby Road, Normanby by Stow

#### **Baseline Context:**

Normanby Road. The B1421, is located to the north of Stow where it exits the settlement at the junction with Church Road. The road takes a slight meandering alignment passing residential properties and farmsteads known as Flat Tops, West Farm and East Farm, before taking a straight route and then entering Willingham by Stow.

**Distance to Cottam Sites**: 4m to Cottam 1

Nearest Viewpoint: VP20, VP14, LCC-C-A

### **Description of Route:**

T097 is a short section of the road which runs south from a tributary of the River Till to the north of properties in Normaby by Stow, south to properties known as Flat tops on Coates Lane.

From the north, the road is bordered by hedges, the eastern one being tall and outgrown, whilst the western boundary hedge being more managed and relatively low cut. The roadside verges are narrow and there is a very narrow footway to the eastern extent of the road running down to East Farm where it widens slightly. Beyond East Farm the eastern boundary hedge is sparser and low-cut, offering views from dwellings over to the east and across Cottam 1 West Site where the field is proposed as bird mitigation immediately adjacent to this road. Views to the west are over arable farmland and of farmsteads in this small cluster of buildings.

Garden boundaries and pasture exist to the west of this road down to Coates Lane closing down views to the west with more intimate field patterns and increased field boundary vegetation in the immediate setting but views over hedgerows provide a more undulating landscape with field hedges and hedgerow trees layered across to the horizon which is wooded in places. Looking east, the landscape is more open in its immediate setting with hedgerows and hedgerow trees stretching beyond the adjacent fields to a partially wooded horizon and views of 'The Ridge' in the distance forming this horizon. To the south the village of Stow is evident, with vegetation screening some parts and Stow Church being a prominent feature.

Overall, this route is relatively intimate despite the speed at which traffic is able to travel due to the relatively well vegetated boundaries. The route varies along its length creating both intimate and open areas with views

**Sensitivity:** *Medium* 

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Substation/s

[Reference: EN010133/APP/C6.3.8.3.4.3.21] January 2			
Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning
The first section of the route would not be significantly affected, as there are no construction works to each side and oblique views towards the second section of the route would be masked by the intervening hedgerows lining Normanby Road and within the intervening field systems. The second section of the route would not be affected due to the distance to the Scheme and the existing field boundaries. The construction works would be located on one side of the route (east side, closest to Normanby Road for a short section of the route. The changes to the second section of the route would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes near Normanby.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a framed proportion of the view and be a dominant feature for only a short length at the second section of the route. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact. There would not be a	The foreground of the views from the first section and the final section of the route will not change. The foreground of the route from the middle section will change to the east from area of agricultural land to areas of panel this will be mitigated by the proposed Shelterbelt and additional tree planting that are part of the Scheme. The changes would be experienced within the context of the surrounding arable fields that are intensive use with very some simple features, and limited character.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15) refer to Viewpoints VP14, VP20 and LCC-C-A.	A similar process to that of construction stage, but with Scheme being no longer operational. This is an assessm of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities the duration of the decommissioning to include site trainoise and vibration from decommissioning activities, dugeneration and site runoff.





	This transport receptor is within the 2km study area for the Cottam 1 substation. There are potentially views of the substation.			
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
in-combination effects [cumulative sites]	Cumulative Effects [Cumulative Developments]
No Intervisibility	There would not be the removal of or changes in individual elements or features of the landscape within the chargea.
	There would be the introduction of new elements and features comprising the solar panel areas and the substate within the character area
	Aesthetic Aspects of the Landscape  Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlement built form would also curtail cumulative visibility.
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotto Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is suffered that the following figures:
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type different from another. The strategic major road network is defined by important historic routes and in contrast, west minor road network links several historic and distinctive smaller string of settlements across the area. Over prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide gr verges and they have a major role in helping to define the quality of the landscape and reducing the visibility acrarea.
	Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of hist settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are few value that are not highly recognised for adding intimacy and interest to the landscape. These relevant character the landscape and land use have some ability to accommodate change without undue adverse effects. The cump visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communication infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with form that plays a positive role in reducing the overall cumulative effects.





SOLAR PROJECT	[Reference: Live 10135/At 17co.3.0.3.4.3.21] Junuary	
		Construction: Very Low
	Not Applicable	Operation (Year 1): Very Low
Magnitude	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Very Low
		Operation (Year 15): Low
		Decommissioning: Very Low
		Construction: Adverse & Short Term
Type of	Not Applicable	Operation (Year 1): Adverse & Long Term
		Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Effect		Operation (Year 15): Beneficial & Long Term
		Decommissioning: Neutral & Short Term
		Construction: Negligible Not Significant
Significance	Not Applicable	Operation (Year 1): Negligible Not Significant
		Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant
of Effect		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Negligible Not Significant





#### Transport Receptor - T099 / Coates Lane, Stow

#### **Baseline Context:**

Coates Lane is located to the southeast of the settlement of Normanby by Stow. This section of the lane heads from the junction with Normanby Road at the location with the residential properties known as Flat Tops and then passes east towards the small settlement of Coates as far as the junction with receptor (T094), which is the local track between South Lane and Coates Lane. This route is a local green lane with a bridge crossing over the River Till just to the southwest of Normanby Gorse.

Looking southeast towards Cottam 1 South Site and northeast towards the Cottam 1 North Site.

**Distance to Cottam Sites**: 0m to Cottam 1 North

Nearest Viewpoint/s: VP14, VP19 and VP20.

#### **Description of Route:**

The first section of the route (as far as the bridge crossing with the River Till) passes as a local green lane through a system of medium scale arable fields divided by hedgerows with a good concentration of mature trees. The field system to the south of the track (at this section) is very regular and geometric with a particularly strong network of hedgerows arranged in rectangular blocks. In contrast, to the north of the track the fields are larger scale, more irregular with less hedgerows and tree cover. The main concentration of vegetation is associated with the course of the River Till, where it's course can be traced in the landscape by the riparian vegetation on its steep-sided channel. The second section of the route (as far as the junction with receptor T094) continues through the arable landscape where the formal geometric pattern of fields is interrupted by the course of the River Till and its smaller tributaries that take a very winding course through the landscape. This section of the route is also framed by the distinctive woodland known as Normanby Gorse.

There is a marked contrast between the first section of the route, which passes through a more open context due to the presence of the geometric fields, where some are divided by low hedgerows. Although there is a strong presence of tree cover to either side of the green lane, there are extended views both towards the north and south. In contrast, the second section of the route is set within a more enclosed context due to the tree cover in the tall hedgerows to each side and Normanby Gorse also provides enclosure and curtails visibility towards the north. The route is influenced by the arable fields and a landscape that is tranquil with very few manmade interventions, apart from the first section where it meets with Normanby Road. The woodlands at Normanby Gorse form a significant component and add balance to the landscape and the mature ash trees within the hedgerows are also a strong feature.

Overall, the route is influenced by the presence of the River Till that passes beneath this local bridge at the junction between the first and second sections. The watercourse is confined within a deep channel, but the tree cover on the local green lane and the strong presence of Normanby Gorse enhance the visual quality of the route. The riparian woodland that follows the meandering course of the River Till is also a distinctive feature as well as the tussocky grassland on the steeply inclined banks of the watercourse. This route offers a pleasant journey towards a quiet landscape. There are intensive levels of management within the arable farmland, but where there is pasture, this gives the impression of an attractive landscape.

**Sensitivity:** *Medium to High* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.



# Transport Receptor – T099 / Coates Lane, Stow

Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change
The first section of the route would not be significantly affected where it passes directly adjacent to the boundary of the Site/Sites. The construction works would be located to the north side of the route only, beyond the course of the River Till. The second section of the route would also not be significantly affected, and this is also due to the shortness of this section and the presence of a consistent hedgerow network such that the effects would be less evident than the first section of the route. The users of both sections of the route would however experience a small level of change. The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows and tree cover. The first section of the route would experience more open views of the construction activities. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the first section of the route.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would not obstruct a wide proportion of the view and would not be a dominant feature. At the second section of the route the receptors would experience glimp		Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15) refer to Viewpoints VP14, VP19 and VP20.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessmen of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic noise and vibration from decommissioning activities, dust generation and site runoff.



	Transport receptor is within the 2km study area of Cottam 1 North substation.			
Magnitude	Low	Low	Low	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Significance of Effect	Minor-Moderate <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	Sequential Frequent Visibility	<u>Fabric of the Landscape</u>
	The first section of the route would be significantly affected where it passes directly adjacent to	There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	the boundary of the Site/Sites. The construction works would be located to the north side of the	
	route only. The second section of the route would be significantly affected, but due to the	There would be the introduction of new elements and features comprising the solar panel areas and the substation area within
	shortness of this section and the presence of a consistent hedgerow network the effects would	the character area
	be less evident than the first section. The users of both sections of the route would however	Anathatic Annacta of the Laurdescure
	experience a significant level of change.	Aesthetic Aspects of the Landscape  Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative
	During the construction stage (the works) and during the operation stage (the panel areas)	developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening
	would appear consistently and with short time lapses between instances. Although there is a	woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail
	slow speed of travel for walkers (farm vehicles may be travelling at speed), there is a hedgerow	cumulative visibility.
	boundary to the north and so the distances between the areas of visibility would be less	
	frequent with some gaps between.	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and
		Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within
	The foreground of the views from the route would change from the agricultural fields (to the	the following figures:
	north side of the route) to reveal both the works during the construction stage and an area of	
	panels during the operation stage, but they would be set back from the route. The changes	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]
	would be experienced in close proximity and within the context of the surrounding arable fields	Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
	with a prevailing character of openness and distinct absence of other development or man-	Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	made features.	   The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different
	The works and the panel areas are in close proximity to the receptor and are clearly visible	from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road
	together in views from selected viewpoints VP14, VP19 and VP20 and also from areas	network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is
	between these viewpoints as the route takes a course from Ingham Road in the south to join	formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in
	with Normanby Road in the west.	helping to define the quality of the landscape and reducing the visibility across the area.
	With Normality Road in the West.	
	Sequential Occasional Visibility	Overall Landscape Character and Visual Amenity
	The panel areas may appear with shorter time lapses between appearances because the	Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement
	observer may be moving more quickly (farm vehicles may be travelling at speed) and users may	with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not
	be travelling slowly as walkers slow down to appreciate the landscape. There are also larger	highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use
	distances between the viewpoints along the route.	have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites
		would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these
		features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
	Construction: Low	Construction: Low
	Operation (Year 1): Low	Operation (Year 1): Low
Magnitude	Operation (Year 1): with only Embedded Mitigation: Low Not Significant	Operation (Year 1): with only Embedded Mitigation: Low Not Significant
	Operation (Year 15): Low	Operation (Year 15): Low
	Decommissioning: Low	Decommissioning: Low





Transport Re	Transport Receptor – T099 / Coates Lane, Stow		
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	Construction: Adverse & Short Term	Construction: Adverse & Short Term	
Type of	Operation (Year 1): Adverse & Long Term	Operation (Year 1): Adverse & Long Term	
	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	
Effect	Operation (Year 15): Neutral & Long Term	Operation (Year 15): Neutral & Long Term	
	Decommissioning: Neutral & Short Term	Decommissioning: Neutral & Short Term	
	Construction: Minor <b>Not Significant</b>	Construction: Minor Not Significant	
Significance	Operation (Year 1): Minor <b>Not Significant</b>	Operation (Year 1): Minor <b>Not Significant</b>	
	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant	
от Ептест	Operation (Year 15): Minor <b>Not Significant</b>	Operation (Year 15): Minor <b>Not Significant</b>	
	Decommissioning: Minor <b>Not Significant</b>	Decommissioning: Minor <b>Not Significant</b>	



[Reference: EN010133/APP/C6.3.8.3.4.3.22] January 2023

### Transport Receptor - T105 / Stow Lane, Ingham

#### **Baseline Context:**

Stow Lane is located to the south of Ingham and to the north of Cammeringham where it follows a straight east west alignment. The lane forms a 'T' junction with the B1398 (Lincoln Road) in the east and then continues west to join with Ingham Road at Furze Hill.

**Distance to Cottam Sites:** 0m to Cottam 1

Nearest Viewpoint: VP16, VP23, VP25

#### **Description of Route:**

T105 heads east from a small lane which heads south to Furze Hill and Lower Furze Hill dwellings. The road is long, narrow, and straight with very intensively managed low-cut hedges on both sides and ditches along its route. There are very few hedgerow trees and occasional passing places for vehicles. The roadside verges are relatively narrow. Views in all directions are open and exposed but to the north a small block of woodland in the foreground and Coates Gorse and Fox Covert further afield are prominent features of the landscape. The Ridge is visible on the raised horizon to the west, whilst Cottam power station is a feature looking east. To the south a block of woodland at Brattleby Thorns and Gorse is evident in the otherwise open landscape.

Further west along this route, the immediate landscape constantly changes with areas of open hedgerows, ditches without hedgerow trees and lines of more regular specimen trees breaking up views to the north. The southern boundary of this road remains more uniform with low cut hedges and few hedgerow trees with ditches adjacent to hedgerows. The road becomes slightly more open, and the road verges are relatively wide. This whole route however affords open and vast views in all directions and the route is influenced by the intensively managed arable landscape with limited field boundary vegetation to all directions.

Overall, this route offers a straight journey across a very simple landscape with very few elements or features of interest. There are intensive levels of management within the arable farmland. There are some many views where the absence of hedgerows enhances the feeling of scale along the route. This is a quiet and isolated location with a notable absence of settlement or other busy roads until Ingham village. The experience is a relatively pleasant and invigorating one but would be an exposed and uninteresting pedestrian route.

**Sensitivity:** *Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.





# Transport Receptor - T105 / Stow Lane, Ingham

Transport Re	nsport Receptor – 1105 / Stow Lane, Ingnam			
	Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning
	The route would not be significantly affected due to the distance from the Scheme to the route. The construction works would be located on one side of the route (south side) and they would only be near to Stow Lane for a short section of the route. The changes to the first section of the route would include the construction activities during site preparation/ enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes close to the boundary of the Site/Sites at the second section of the route.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a framed proportion of the view and be a dominant feature for only a short length at the first section of the route. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the north and south of the second section of the route.  Construction Access Transport receptor will be affected by the proposed construction access into Cottam 1 North and South sites.  Cable	The foreground of the views from the route at the first section would change from the agricultural fields (south side of the route) to an area of panels, but they would be set back behind the existing hedgerows and will have new hedgerows reinforced with tree planting to mitigate views from this route. The changes would be experienced within the context of the surrounding arable fields that are intensive use with very some simple features, and limited character.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15) refer to Viewpoints VP16, VP23 and VP25.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term



Significance of Effect  Negligible Not Significant  Negligible Not Significant  Negligible Not Significant  Negligible Not Significant	Significant Negligible Not Significant
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In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
in-combination criects [cumulative sites]	Cumulative Effects [Cumulative Developments]
No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	There would be the introduction of new elements and features comprising the solar panel areas and the substation are within the character area
	Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out further detail within the following figures:
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or a different from another. The strategic major road network is defined by important historic routes and in contrast, the west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
	Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with buil form that plays a positive role in reducing the overall cumulative effects.
de Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low
Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term



Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.4.3: Transport Receptors – Transport Not Significant [Reference: EN010133/APP/C6.3.8.3.4.3.22] January 2023

Significance of Effect  Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Negligible Not Significant
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[Reference: EN010133/APP/C6.3.8.3.4.3.23] January 2023

## Transport Receptor - T107 / Ingham Road, Stow

#### **Baseline Context:**

Ingham Road is located to the east of the settlement of Stow and takes an east west route to join with Stow Lane east of Furze Hill. The road has a straight alignment and passes through the small settlement of Stow Pasture. It is bordered by small to medium scale field systems to each side with a strong hedgerow network and occasional blocks of trees.

Distance to Cottam Sites: 0m to Cottam 1

Nearest Viewpoint: VP15 / VP16 / LCC-C-A

#### **Description of Route:**

The first section of the route starts to the east of Stow and continues east to Squire's Bridge which goes over the River Till. The second section of the route travels east from Squire's Bridge until it joins onto Stow Lane. The first section of the route is bordered by grass verges with strong hedgerows to either side with a few frequent hedgerow trees to give the route a pleasant character. The hedgerows are thick and well established with only a few gaps to the south side of the route that gives vast views of the flat landscape. This section of the route is home to multiple residential properties (north of route) along with The Pastures as the route gets close to Squire's Bridge. The character is of a settlement edge with more varied and some non-native vegetation to the roadside boundaries and neat, managed grass verges but with a good level of native and non-native tree cover. This continues out of the village to the north of the road, whilst native hedgerows and arable/pasture fields extend to the south. The road is long, narrow, and straight with views east eventually reaching 'The Ridge' in the distance and some woodland blocks in the mid-distance evident.

Travelling further east past the properties at Stow, the landscape becomes more agricultural with building and fields bordered by lengths of native hedgerows. These vary along the route but there are few hedgerow trees in the main. Some areas of open verge exist whilst other areas have hedges on both sides of the road. The verges are relatively wide, making for a pleasant and varied route along this road. Towards the eastern end of this road, the hedgerows become low cut and there are very few if any hedgerow trees in places.

The route looks north and south towards Cottam 1 West Site and southeast and northeast towards Cottam 1 South Site.

The first section of the route is more enclosed, and this makes the route appear and seem more intimate. As the route continues east the views open up and is only then broken up by the strong presence of woodland in the distance. The riparian woodland that follows the meandering course of the River Till is also a distinctive feature as well as the wide grass verges on Ingham Road. The intensive levels of management within this arable farmland add decline to the natural qualities of the view, but the overall impression is that of a simple, calm, and muted landscape.

Overall, this route offers a journey across a simple landscape with few elements or features of interest, but it is nonetheless a pleasant route. There are intensive levels of management within the arable farmland. This is a quiet location with a notable absence of settlement or other busy roads. This route offers an interesting journey along an attractive local lane with distinctive grass verges. The experience is a pleasant and invigorating but can be a little exposed in places.

**Sensitivity:** *Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.



Transport Re	sport Receptor - T107 / Ingham Road, Stow			
	Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning
	The second section of the route would not be significantly affected, as there are no construction works to each side and oblique views towards the first section of the route would be masked by the intervening hedgerows lining Ingham Road and within the intervening field systems. The first section of the route would not be affected where it passes near to the boundary of the Site/Sites. The construction works would be located on one side of the route (south side) and they would only be adjacent to Ingham Road for a short section of the route. The changes to the first section of the route would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes near to the boundary of the Site/Sites at the first section of the route.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a framed proportion of the view and be a dominant feature for only a short length at the second section of the route. There would be a considerable change to the arable land use, but the field boundaries and any	The foreground of the views from the route at the first section would change from the agricultural fields (to one side of the route) to an area of panels, but they would be set back behind the existing hedgerows. The changes would be experienced within the context of the surrounding arable fields that are intensive use with very some simple features, and limited character.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15) refer to Viewpoints VP15, VP16 and LCC-C-A.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
	Substation/s			



	The road partially crosses the 2km study area, to the south of Normanby by Stow.			
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

i ciiect		
ransport Re	eceptor – T107 / Ingham Road, Stow	
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	No Intervisibility	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the eas west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects
/lagnitude	Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low



30244 7400201		[Reference: Live 10 155/AFF/Co.5.0.5.4.5.25] January 2025
		Construction: Adverse & Short Term
Type of	Not Applicable	Operation (Year 1): Adverse & Long Term
	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Effect		Operation (Year 15): Beneficial & Long Term
		Decommissioning: Neutral & Short Term
		Construction: Negligible Not Significant
Significance	Not Applicable	Operation (Year 1): Negligible <b>Not Significant</b>
	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant
of Effect		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Negligible Not Significant



[Reference: EN010133/APP/C6.3.8.3.4.3.24] January 2023

## Transport Receptor - T109 / Unnamed Road, Stow

#### **Baseline Context:**

This unnamed road is located to the south of the settlement of Coates, where it exits Ingham Road and takes a meandering alignment through the arable fields and then bends back to rejoin Ingham Road at the junction with Stow Lane. The road shares its route with a public bridleway (Camm/31/1) which passes Furze Hill and Lower Furze Hill at which point the bridleway continues east along the unnamed road and then south towards Thorpe Wood.

Distance to Cottam Sites: 0m to Cottam 1

Nearest Viewpoint: VP12, VP16, VP23

#### **Description of Route:**

The first section of the route emerges south from Stow Lane. This route is bordered by grass verges on either side and low-cut hedgerow which then become taller which screen some views to the west. The second section where it travels over a small watercourse proceeds to then curve around to Lower Furze Hill where the track is open and exposed. Again, it crosses the small watercourse which links up to the River Till. The route looks southeast towards Cottam 1 South Site and west towards Cottam 1 West Site.

There is a subtle contrast between the first and the second section. The first section of the route has broken views to the east and the west providing for a relatively sheltered short section of this route. The second section of the route is opened up to open fields to the south and the bend of the track as it follows the curvature of a ditch which is a valuable feature, meandering through structured arable fields. The route looks south onto woodlands such as Thorpe Wood, Brattleby Gorse and Cammeringham Low Covert as they stand as visible markers in the distance. The built-up feature of Cold Harbour is also prominent to the east of the final section of the route.

The route is influenced by the surrounding field boundaries and ditches which offers an interesting route and experience in the landscape joining the Bridleway to the west. Overall, this route offers calm and tranquil views across the rolling landscape with good levels of woodland cover locally and long-distance views.

Sensitivity: Medium

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.





# Transport Receptor – T109 / Unnamed Road, Stow

eceptor - T109 / Unnamed Road, Stow					
Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning		
The first section of the route would not be significantly affected, as there are no construction works to each side and oblique views towards the second section of the route would be masked by the intervening hedgerows lining the unnamed road and within the intervening field systems. The second section of the route would not be affected where it passes directly adjacent to the boundary of the Site/Sites. The construction works would be located on one side of the route (east side) and they would only be adjacent to the road for a short section of the route. The changes to the second section the route would include the construction activities during site preparation / enabling works, construction, and commissionir with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar pan areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites at the second section of the route.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the layin down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a framed proportion of the view and be a dominant feature for only a short length at the second section of the route. There would be a considerable change to the arable land use, but th fi		Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15) refer to Viewpoints VP12, VP16 and VP23.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.		





	Substation/s Transport receptor is outside the 2km study area for Cottam 1 North substation.			
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

Transport Receptor – T109 / Unnamed Road, Stow	
In-Combination Effects [Cumulative	ces] Cumulative Effects [Cumulative Developments]
No Intervisibility	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area
	Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
	Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
Magnitude Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low



Cottam
SOLAR PROJECT

Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
		Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
		Construction: Negligible <b>Not Significant</b>
Significance	Not Applicable	Operation (Year 1): Negligible <b>Not Significant</b>
of Effect	Not Applicable	Operation (Year 1): with only Embedded Negligible: Not Significant
		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Negligible Not Significant





## Transport Receptor – T113 / Furze Hill, Stow

#### **Baseline Context:**

Furze Hill is located to the south of Ingham Road and to the east of the residential property and farmstead known as Lower Furze Hill. The route shares its path with bridleway (Camm/31/1) where it heads south passing Thorpe Wood as far as the residential property known as The Grange.

**Distance to Cottam Sites**: 203m to Cottam 1

Nearest Viewpoint: VP12, VP15, VP16

#### **Description of Route:**

The first section of the routes leads off Ingham Road and continues south from Furze Hill then curves east at Lower Furze hill and travels parallel to a U shape ditch just northeast of Lower Furze Hill. The track has open views in all directions as there is little no hedgerow planting or tree cover to close down views to the wider landscape. The route looks east towards Cottam 1 South Site and west towards Cottam 1 West Site.

This route as this bridleway offers extensive views in all directions. The woodlands to the southeast such as Thorpe Wood, Cammeringham Low Covert and Brattleby Gorse are the only features within this landscape to break up views. The built elements such as Furze Hill and Lower Furze Hill along with mast poles to Cold Harbour (to the east) are minor detracting features in the otherwise tranquil and open landscape but offer some variation to the route.

the route is influenced by the regular and geometric fields divided with very few hedgerow divisions and ditches. The collection of small woodlands to the southwest of Cammeringham are visible in the distance to the southeast with woodland evident to the north across the Ingham Road.

Overall, this route offers a journey across a simple landscape with very few elements or features of interest. There are intensive levels of management within the arable farmland. There are some extended views where the absence of hedgerows enhances the feeling of scale along the route, and which opens up views along its length as it approaches Thorpe Wood in the south. This is a relatively quiet location set back off the Ingham Road.

**Sensitivity:** *Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

The visual effects with only the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.



Transport Re	nsport Receptor - T113 / Furze Hill, Stow				
	Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning	
	The second section of the route would not be significantly affected where it passes near to the boundary of the Site/Sites. The construction works would be located on one side of the route (east side) and they would only be adjacent to the bridleway for a short section of the route. The changes to the second section of the route would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a framed proportion of the view and be a dominant feature for only a short length at the second section of the route. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the west and south of the first section of the route.  Construction Access Transport receptor will not be affected by proposed construction access into Cottam 1 South Site.  Cable Route Corridor Transport receptor is outside of the 2km study area for Cottam Cable Ro	The foreground of the views from the route at the second section would change from the agricultural fields (to east of the route) to an area of panels, but they would be set back behind the proposed hedgerows and shelterbelts which will mitigate views from this route. The changes would be experienced within the context of the surrounding arable fields that are intensive use with very some simple features, and limited character.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15) refer to Viewpoints VP12, VP15 and VP16.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.	
Magnitude	Very Low	Very Low	Low	Very Low	
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term	



Cottam			Appendix 8.3.4.3: Transport Receptors [Reference: EN010133/APP/C6.		
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>	

Transport Re	ansport Receptor - T113 / Furze Hill, Stow				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]			
	No Intervisibility	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.			
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area			
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.			
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:			
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]			
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.			
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects			
Magnitude	Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Low Decommissioning: Very Low			
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term			



Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.4.3: Transport Receptors – Transport Not Significant [Reference: EN010133/APP/C6.3.8.3.4.3.25] January 2023

Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Negligible Not Significant
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Transport Receptor - T125 / Thorpe Lane, Brattleby

#### **Baseline Context:**

Thorpe Lane is located to the north of the A1500 Till Bridge Road, where it follows an east west alignment passing between the settlements of Sturton by Stow and Brattleby. The lane follows an east west route with a 'dogleg' section where it joins with Lowfields that serves the settlement of Aisthorpe.

Distance to Cottam Sites: 3m to Cottam 1

Nearest Viewpoint: VP4, VP5, VP6.

#### **Description of Route:**

T125 runs from The Lodge at the entrance to The Grange and heads east to Brattleby where it forms a junction and joins onto B1398. There is a long S bend along the otherwise very straight route.

At the first section of the route, Thorpe Lane is bordered with relatively narrow grass verges and hedgerows on both sides. The hedgerow directly to the north of the route is taller and blocks views to the agricultural fields to the north. The new hedgerows directly to the south of the route are set low in a ditch and therefore offer extensive views to the south. Small power lines are a minor detractor in this section of the route. Travelling further east the hedgerows become more consistent but are low cut and offer views both north and south. The general scene is open in all directions with the long, straight road a strong feature. There are distant views of woodland blocks with some closer to the north including Brattleby Gorse, Brattleby Thorns, South Spinney and Thorpe Wood further northwest.

At the second section of the route the road runs round a small spinney to the north of the route before heading east again. Here the grass verges are wider on both sides and the hedgerows on both sides are set within ditches and maintained to approximately the same height. The hedgerows are set low and do not close down visibility to the surrounding agricultural fields. The view is located on Thorpe Lane, looking north with the southern extent of the Cottam South 1 Site in the foreground.

Travelling east along this route the scene remains much the same with very limited hedgerow trees and open views until Thorpe Lane Farm where the more manicured and managed landscape is evident. This also provides more features with hedgerow trees planted along the northern boundary of the road adjacent to fields of pasture creating a more enclosed feel and broken views to the north, whilst the landscape to the south remains the same. A managed area of willow coppice existing to a block to the north of the road with a line of formalised poplar trees further screening views north.

This northern boundary vegetation begins to blend less formal tree and hedge planting to roadside heading towards Brattleby and an increase in general tree cover and quality is associated with landscape at Brattleby Hall. the formal hedge to the south of the road affords views across to the south and west as the route rises slightly towards The Ridge. Views across the landscape at this point include Cottam power station and blocks of woodland and a predominantly wooded horizon.

The route is influenced by the varying hedgerow management along its length, the rising ground to the east and the long views to the west.

Overall, this route offers a journey across a simple landscape with some elements or features of interest. There are intensive levels of management within the arable farmland. There are a few extended views where the absence of hedgerows enhances the feeling of scale along the route. This is a quiet, tranquil route with a notable absence of settlement or other busy roads. This route offers an interesting journey along an attractive local lane with varying grass verges. The experience is a pleasant and invigorating.

Sensitivity: Medium

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



The visual effects **with only** the Embedded Mitigation taken into account equate to those effects set out for the operation stage (Year 1) and this includes secondary mitigation which will have been carried out but will have had limited physical or visual impact at this Embedded Mitigation stage.

Construction	Operation (Year 1)	Mitigation (Operation Year 15)	Decommissioning
The first section of the route would not be significantly affected by construction due to the existing hedgerow screening the site from the route. The second section of the route would not be affected due to the existing woodlands to the north of the route screening the Cottam 1 Site/Sites. The construction works would be located on one side of the route (north side) and they would only be adjacent to Thorpe Lane for a short section of the route. The changes to the first section of the route would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be partially screened by the foreground hedgerows. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views, particularly where the route passes directly adjacent to the boundary of the Site/Sites at the first section of the route.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a framed proportion of the view and be a dominant feature for only a short length at the second section of the route. There would be a considerable change to the arable land use, but the field boundaries and any associated tree cover would remain intact. There would not be a fundamental change	The foreground of the views from the route at the first section would change from the agricultural fields (to one side of the route) to an area of panels, but they would be set back behind the existing hedgerows. The changes would be experienced within the context of the surrounding arable fields that are intensive use with very some simple features, and limited character.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on operation magnitude of change (Year 15) refer to Viewpoints VP4, VP5 and VP6.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic noise and vibration from decommissioning activities, dust generation and site runoff.



	Substation/s Transport receptor is outside of the 2km study area for Cottam 1 North substation.			
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

Recepto	tor – T125 / Thorpe Lane, Brattleby	1		
In-Co	-Combination Effects [Cumulative Si	tes]	Cumulative Effects [Cumulative Develop	pments]
	Intervisibility  Output  Outpu	tes]	There would not be the removal of or changes in inclure.  There would be the introduction of new elements are within the character area  Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows cumulative developments would not be experienced distance, the intervening woodlands, hedgerows, an built form would also curtail cumulative visibility.  There are local patches of cumulative visibility which Site/Sites and Gate Burton Energy Park, Tillbridge Sofurther detail within the following figures:  Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Figure 8.15.2.8 Cottam 1, 2, 3a and 3b West Burton The landscape is shaped by the wide range of local addifferent from another. The strategic major road net west minor road network links several historic and different from another. The strategic major road netwest minor road network links several historic and different from another. The strategic major road netwest minor road network links several historic and different from another. The strategic major road netwest minor road network links several historic and different from another. The strategic major road netwest minor road network links several historic and different from another. The strategic major road netwest minor road network is formed by narrow lanes to verges and they have a major role in helping to definate and the community.  Overall Landscape Character and Visual Amenity.  Overall, the character of the landscape and the community of the landscape and the community of the landscape and the community.	dividual elements or features of the landscape within the character and features comprising the solar panel areas and the substation area that with the Cottam 1 Site/Sites, cumulative visibility with the discress the majority of the 5km study area. This is due to the add tree cover between the Site/Sites. The intervening settlements and the may be focus of likely significant effects, between the Cotton 1 polar and West Burton Solar Park. This cumulative visibility is set out in Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Cumulative Developments Augmented ZTV [C6.3.4.15.2.9] and strategic road networks, which make one landscape type or area twork is defined by important historic routes and in contrast, the east distinctive smaller string of settlements across the area. Overall, the that are often tranquil and hedged to both sides with wide grassed the quality of the landscape and reducing the visibility across the immunications and infrastructure is shaped by evidence of historic hamlets such as Thorpe le Fallows and Coates, which are features macy and interest to the landscape. These relevant characteristics of
			distance, the intervening woodlands, hedgerows, an built form would also curtail cumulative visibility.  There are local patches of cumulative visibility which Site/Sites and Gate Burton Energy Park, Tillbridge Sofurther detail within the following figures:  Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Sola Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton The landscape is shaped by the wide range of local addifferent from another. The strategic major road net west minor road network links several historic and deprevailing road network is formed by narrow lanes to verges and they have a major role in helping to definate and they have a major role in helping to definate and the character of the landscape and the composetilement with farms, nucleated villages, and small	n may be footblar and West Cumulative lar Cumulative and strategic twork is definitionally are the quality are the quality and into commodate the overall climited the overall climited and strategic and into the commodate of the overall climited are considered.



SOLAR PROJECT		[Reference, ENGIGISS/APP/Co.5.6.5.4.5.20] January 2025
		Construction: Very Low
	Not Applicable	Operation (Year 1): Very Low
Magnitude	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Very Low
		Operation (Year 15): Low
		Decommissioning: Very Low
		Construction: Adverse & Short Term
Type of	oe of Not Applicable	Operation (Year 1): Adverse & Long Term
	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Effect		Operation (Year 15): Beneficial & Long Term
		Decommissioning: Neutral & Short Term
		Construction: Negligible Not Significant
Significance	Not Applicable	Operation (Year 1): Negligible <b>Not Significant</b>
_	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant
of Effect		Operation (Year 15): Minor <b>Not Significant</b>
		Decommissioning: Negligible Not Significant



# Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.5.1: PRoW Receptors – PRoW Overview

[Reference: EN010133/APP/C6.3.8.3.5.1.1] January 2023

RouteCode	Status	Site	Distance (m)	Potential Cumulative (Combined)	Potential Cumulative (Sequential)	Relevent Viewpoint/s	Receptor Baseline	Primary Mitigation (Embedded)	Secondary Mitigation	Significant Effects	Notes
Blyt/24/1 Blyt/24/1 Blyt/24/2 Blyt/24/2		Cottam 3a option area     Cottam 3b option area     Cottam 3a option area     Cottam 3b option area     Cottam 3b option area	619 439 774 290	N	N	LCC-C-S	Public Footpath: Located to the southeast of the settlement of Blyton. Leading from the eastern edge of Blyton at the junction with public footpath (Blyt/25/1). The footpath follows an almost north south alignment and then meets with Pilham Lane in the south. Open aspect towards the northern section of the foopath. The southern section has limited visibility due to the bordering hedgerows and trees within the hedgerows. The vegetation bordering the mainline railway also provides screening and enclosure.		Not applicable	No	No visibility towards Cottam 3a or 3b Site/Site due to the flat, low-lying landform and the intervening woodland at the western edge of the settlement of Pilham. The vegetation bordering the mainline railway and tree planting along Station Road also close down visibility towards the Site/Sites.
Blyt/25/1 Blyt/25/1 Blyt/25/2 Blyt/25/2 Blyt/25/3 Blyt/25/3		1 Cottam 3a option area 1 Cottam 3b option area 1 Cottam 3a option area 1 Cottam 3b option area 1 Cottam 3b option area 1 Cottam 3a option area 1 Cottam 3b option area	545 795 664 833 714 858	N	N	LCC-C-S LCC-C-S VP62 VP62 LCC-C-S LCC-C-S	Public Footpath: Within the settlement of Blyton. Leading from High Street, the footpath follows an almost east west alignment and then meets with Church Lane in the west. Enclosed aspect towards the western end and the eastern section has some visibility towards the south over the bordering fields.	Not applicable	Not applicable	No	No visibility towards Cottam 3a or 3b Site/Site due to the flat, low-lying landform and the intervening woodland at the western edge of the settlement of Pilham. The vegetation bordering the mainline railway and tree planting along Station Road also close down visibility towards the Site/Sites.
Blyt/26/1 Blyt/26/1		1 Cottam 3a option area 1 Cottam 3b option area	774 438	N	N	LCC-C-S	Public Footpath: Located to the southeast of the settlement of Blyton. Leading from public footpath (Blyt/24/1 and 24/2). This is a short section of footpath that passes almost east west to meet with Church Lane. The footpath has an open aspect along its length, but the vegetation along the mainline railway provides screening and enclosure towards the south.	Not applicable	Not applicable	No	No visibility towards Cottam 3a or 3b Site/Site due to the flat, low-lying landform and the intervening woodland at the western edge of the settlement of Pilham. The vegetation bordering the mainline railway and tree planting along Station Road also close down visibility towards the Site/Sites.
Blyt/28/1 Blyt/28/1 Blyt/28/2 Blyt/28/2		1 Cottam 3a option area 1 Cottam 3b option area 1 Cottam 3a option area 1 Cottam 3b option area 1 Cottam 3b option area	789 830 947 900	N	N	LCC-C-S	Public Footpath: Located to the south of the settlement of Blyton. Leading from Church Lane, the footpath follows a 'dog-leg' alignment and then meets with the A159 (Thonock Road) in the west. The footpath is bordered to the north by the settlement edge (at its southern part). There is a partly open aspect towards the south from the length of the footpath.	No applicable	Not applicable	No	No visibility towards Cottam 3a or 3b Site/Site due to the flat, low-lying landform and the intervening woodland at the western edge of the settlement of Pilham. The vegetation bordering the mainline railway and tree planting along Station Road also close down visibility towards the Site/Sites.
Blyt/29/1 Blyt/29/1 Blyt/29/2 Blyt/29/2		1 Cottam 3a option area 1 Cottam 3b option area 1 Cottam 3a option area 1 Cottam 3b option area 1 Cottam 3b option area	947 929 801 708	N	N	LCC-C-S	Public Footpath: Located to the southeast of the settlement of Blyton. Leading from public footpath (Blyth/30/3), the footpath follows for a short length and then meets with Church Lane in the south. The footpath is bordered to the north by the settlement edge at (its northern part). There is a partly open aspect towards the south from the length of the footpath.	Not applicable	Not applicable	No	No visibility towards Cottam 3a or 3b Site/Site due to the flat, low-lying landform and the intervening woodland at the western edge of the settlement of Pilham. The vegetation bordering the mainline railway and tree planting along Station Road also close down visibility towards the Site/Sites.
Blyt/30/1 Blyt/30/1		1 Cottam 3a option area 1 Cottam 3b option area	842 946	N	N	LCC-C-S	Public Footpath: Within the settlement of Blyton. Leading from Church Lane, the footpath follows an almost east west alignment and then meets with Paddock Lane in the south. The footpath is bordered on all sides by the built settlement.	Not applicable	Not applicable	No	No visibility towards Cottam 3a or 3b Site/Site due to the surrounding built settlement.
Blyt/32/1		1 Cottam 3a option area	555	N	N	LCC-C-U	Public Footpath: Located to the north of the settlement of Blyton. Leading from Sandbeck Lane, the footpath follows an almost north south alignment and then meets with Blyton Road in the north. The footpath crosses the small scale field systems, passing Willow Tree Farm and the sewage works and also crosses over Laughton Highland Drain.	Not applicable	Not applicable	No	No visibility towards Cottam 3a Site/Sites due to the very slightly undulating and low-lying landform. The intervening riparian vegetation along the course of the Laughton Highland Drain also closes down visibility. The propertie at Bluebell Farm and Blyton Grange and the residential edge of Blyton also provide screening towards the Site/Sites.
Bram/66/1		1 Shared cable corridor and access	0	N	N	n/a	Public Footpath: Located along access track just south of Marton, near the River Trent. The footpath heads south and then takes a 'right-angled' turn to meet with the A156 to the west of Bunker's Hill Warren. The footpath crosses the arable and pastoral landscape where there are hedgerows with some tree cover.	Not applicable	Not applicable	No	Some potential visibility towards Shared Cable Corridor Access, but due to the temporary nature of the construction works the effects would be limited.
Camm/31/1 Camm/31/1		Cable corridor and access     Cottam 1 option area	679 217	Y	Y	VP11, VP12 and VP16	1	I .	1 ' '	Yes	Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Open visibility towards the Cottam 1 South Site/Sites due to the flat, low- lying landform and the absence of intervening hedgerows and woodland cover along parts of the route, particularly the southern section of the route. New planting along the east and west boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.

Corr/22/1	1 High voltage cable corrider and access	127	1		1	Carringham The feetweth fellows a route north from Church Lone	labo maraburasa	lhardering the		Cable Carridge and Assess but due to the
Corr/22/1 Corr/22/2	1 High voltage cable corridor and access 1 Cottam 2 option area	137 658				1	the northwest	bordering the northwest		Cable Corridor and Access, but due to the
Corr/22/3	1 Cottam 2 option area	675				passing the properties of Old Hall and Hall Farm before reaching Pilham Lane. The bridleway is enclosed to the southern section due to the woodland cover around Old Hall and Hall Farm. The northern section of the route is more open, but views towards the Site/Sites are curtialed by intervening hedgerows and the vegetation bodering Corringham Beck.		boundaries (which share a boundary with Corringham Beck) of the Cottam 2 Site/Sites.		temporary nature of the construction works the effects would be limited. Some visibility towards the Cottam 2 Site/Sites. The hedgerow bordering the south side of Pilham Lane and the intervening field hedgerows to the south of the lane are likely to close down visibility. The riparian vegetation bordering Corringham Beck and the flat, low-lying landform is also likely to curtail views. New planting along the northwest boundaries of the Cottam 2 Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.
Corr/23/1	1 Cottam 2 option area	861	N	N	VP48	Public Footpath: Located within the settlement of Corringham. The	Not applicable	Not applicable	No	No visibility towards the Cottam 2 Site/Sites
Corr/23/2	1 Cottam 2 option area	982				footpath heads north from Poplar Lane along a minor track that forms a junction with Middle Street. The footpath is enclosed to all sides by built development.				due to the built development within the settlement of Corringham.
Corr/771/1	1 Cottam 2 option area	625	N	N	VP48	Public Footpath: Located within the setlement of Corringham. The footpath passes from Church Lane and heads west to meet with the access to St Lawrence's Church. The footpath is enclosed to all sides by built development.	Not applicable	Not applicable	No	No visibility towards Cottam 2 Site/Sites due to built development within the settlement of Corringham.
Fill/767/1 Fill/767/1	2 Cable corridor and access 2 Cottam 1 option area	274 16	Y	Y	VP35, VP36 and LCC-C-H	Public Bridleway: Located to the west of the settlement of Glentworth. The bridleway heads north from Willingham Road at North Farm to meet with bridleways (Fill/85/1 and Fill/85/2). The bridleway is partly enclosed along its length, since there is a field hedgerow to the west boundary.	Panels set back from boundaries of Cottam 1 North Site/Sites.	New planting bordering the boundaries of the Cottam 1 North Site/Sites.	No	Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards the Cottam 1 North Site/Sites. There are few hedgerows and woodland cover and hedgerows are also absent to the east side of the bridleway leaving open views towards the east. New planting along the boundaries of the Cottam 1 North Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.
Fill/85/1	2 Cable corridor and access	365	Y	Υ	VP35 and VP41	Public Bridleway: Located to the west of the settlement of Glentworth.	Panels set back from	New planting	No	Some potential visibility towards Cable
Fill/85/1	2 Cottam 1 option area	231			VP35 and VP41	The bridleway heads south from Kexby Road at Glentworth Grange to	the east and west	bordering the east		Corridor and Access, but due to the temporary
Fill/85/2 Fill/85/2	2 Cable corridor and access 2 Cottam 1 option area	16 0			LCC-C-G VP34, VP35 and LCC-C-G	meet with bridleways (Fill/767/1 and Fill/85/2). The bridleway is mostly open along its length, since there is an absence of field hedgerows, woodland and tree cover.	boundaries of the Cottam 1 North Site/Sites.	and west boundaries to each side of the bridleway of the Cottam 1 South Site/Sites.		nature of the construction works the effects would be limited. Some visibility towards the Cottam 1 North Site/Sites. There are few hedgerows and woodland cover and hedgerows are also absent leaving open views from the bridleway to each side. New planting along the northwest boundaries of the Cottam 2 Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.
Fill/86/1	2 Cable corridor and access	415	Y	Υ	VP32 and VP33	Public Bridleway: Located to the southwest of the settlement of	Panels set back from	New planting	Yes	Some potential visibility towards Cable
Fill/86/1	2 Cottam 1 option area	0				Fillingham. The bridleway heads south from Willingham Road to meet with bridleway (Ingh/24/1) which then crosses in a diagonal alignment	east boundary of Cottam 1 North Site/Sites.	bordering the east boundary of the bridleway where it forms the boundary with the Cottam 1 North Site/Sites.		Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Open visibility towards the Cottam 1 North Site/Sites due to the the absence of intervening hedgerows and woodland cover along the route. New planting along the east and west boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.
Gltw/85/1	2 Cable corridor and access	819	Υ	Υ	VP35 and VP41	Public Bridleway: Located to the west of the settlement of Glentworth.		New planting	No	Some potential visibility towards Cable
Gltw/85/1	2 Cottam 1 option area	264				The bridleway heads south from Kexby Road at Glentworth Grange to meet with bridleways (Fill/85/1, Fill/767/1 and Fill/85/2). The bridleway is mostly open along its length, since there are no field hedgerows to the boundary of the bridleway.	boundary of Cottam 1 North Site/Sites.	bordering the boundary of the Cottam 1 North Site/Sites.		Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards the Cottam 1 North Site/Sites. There are few hedgerows and woodland cover and hedgerows are also absent leaving open views from the bridleway to each side. New planting along the east and west boundaries of the Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15.
Heap/1170/1	2 High voltage cable corridor and access	273	N	N	n/a	Public Bridlway: Located to the northeast of the small settlement of Heapham. The bridleway heads north from Elm Tree Farm along Heapham Lane to join with Kirton Gate Lane before taking a 'right-angled' turn to meet with Bratt Field South Road. There is a dense	Not applicable	Not applicable	No	No visibility towards High Voltage Cable Corridor and Access due to dense hedgerows and tree cover to each side of the bridleway.
Ingh/17/1	1 Cottam 1 option area	882	N	N	VP27	Public Footpath: Located to the west of the settlement of Ingham. The footpath heads from the B1398 (Middle Street) passing Cliff House to join with the A15 (Ermine Street) in the east.		Not applicable	No	No visibility towards the Cottam 1 North Site/Sites due to the intervening settlement of Ingham.
Ingh/235/1	1 Cable corridor and access	894	N	N	VP22	Public Footpath:Located within the setttlement of Ingham to the	Not applicable	Not applicable	No	No visibility towards Cottam 1 North or the
Ingh/235/1	1 Cottam 1 option area	545				southwest part. The foopath is a short section that passes across The Green.				Cable Coridor and Access due to the intervening settlement of Ingham.

Ingh/24/1	2 Cable corridor and access	859	Υ	Υ	VP26 and LCC-C-F	Public Bridleway: Located to the northwest of the settlement of Panels set back fr	m Planting bordering	No	Some potential visibility towards Cable
Ingh/24/1	2 Cottam 1 option area	1				Ingham. The bridleway heads diagonally from its connection with east boundary of	ne the east boundary of		Corridor and Access, but due to the temporary
Ingh/24/2	2 Cottam 1 option area	875				bridleway (Fill/86/1) towards Ingham before taking a turn south along Shorth Lane to meet with West End. The section of the bridleway that follows Short Lane is enclosed with tall hedgerows and good tree cover. Where the bridleway cuts diagonally across the field this follows a local watercourse and this section is open with a lack of hedgerows and tree cover.	the Cottam 1 North Sites.		nature of the construction works the effects would be limited. Some visibility towards the Cottam 1 North Site/Sites. There are few hedgerows and woodland cover and hedgerows are also absent leaving open views from the bridleway towards the west. New planting along the east boundaries of the Site/Sites will curtial views in Year 1 and close down visibility in Year 15.
Ingh/25/1	1 Cottam 1 option area	809	Y	Υ	VP26	Public Footpath: Located to the west of the settlement of Ingham. The footpath heads south from Long Lane and then makes a slight 'dog-leg' turn to meet with footpaths (Ingh/27/3 and 27/4) in the south. The northern section of footpath is open with no hedgerow, but bordered to the west by a regular line of young trees that are closely spaced. The southern section is bordered by a tall, dense hedgerow and very few individual trees.	Not applicable	No	No visibility towards Cottam 1 North of South Site/Sites due to distance and intervening hedgerows and tree cover.
Ingh/26/2	1 Cottam 1 option area	545	Υ	Υ	VP26	Public Footpath: Located to the west of the settlement of Ingham. The Panels set back fr	m Planting bordering	No	Some potential visibility towards Cable
Ingh/26/3	1 Cable corridor and access	644			VP18 and VP21	footpath heads west along Long Lane, passing Low Farm where it southeast boundary	y the southeast		Corridor and Access, but due to the temporary
Ingh/26/3	1 Cottam 1 option area				VP18 and VP21	makes a 'dog-leg' turn and then progresses as far as the minor tributary of the River Till where it meets with footpath (Stow/83/1). The western section of the footpath passes parallel to an existing hedgerow (with isolated trees) along its north side. The eastern section also follows the existing hedgerow on its north side, but becomes enclosed by a small woodland block close to the junction with Long Lane. The footpath is located just to the north of Coates Gorse, which forms a group with other small woodlands and provides screening to the south.	boundary of the Cottam 1 North Site/Sites.		nature of the construction works the effects would be limited. Very minor visibility towards Cottam 1 North Site/Sites. There is an open boundary to the western most section of the footpath where it meets with footpath (Stow/83/1) leaving partially open views towards the west (there is an intervening north south boundary hedgerow between the Site/Sites and this location, which closes down some visibility). New planting along the southeast boundary of the Cottam 1 North Site/Sites at this location will curtail views in Year 1 and help close down visibility in Year 15.
Ingh/27/3	1 Cottam 1 option area	809	Υ	Υ	VP18 and VP21	Public Footpath: Located to the southwest of the settlement of Panels set back fr	m Planting bordering	No	Some potential visibility towards Cable
Ingh/27/4	1 Cable corridor and access	894			LCC-C-E	Ingham. The footpath heads west from the junction with footpath northeast bounda	y the northeast		Corridor and Access, but due to the temporary
Ingh/27/4	1 Cottam 1 option area	624			LCC-C-E	(Ingh/27/2) passing the sewage works and then taking a short 'dog-leg' of Cottam 1 South	boundary of the		nature of the construction works the effects
Ingh/27/5	1 Cable corridor and access	420			VP22 and VP23	turn just to the southeast of Low Farm. The footpath then takes a Site/Sites.	Cottam 1 South		would be limited.Some visibility towards
Ingh/27/5	1 Cottam 1 option area	105			VP22 and VP23	'right-angled' turn south to meet with Stow Lane. The eastern section of the footpath is bordered by a strong hedgerow network with mature trees as far as the sewage works. The middle section of the footpath is more open with a low hedgerow and no hedgerow trees. The western section of the footpath is then bordered by tree cover (for a short section to the west of the sewage works) and then takes an open route (with very low cut hedgerows and no trees) before joining Stow Lane.	Site/Sites.		Cottam 1 South Site/Sites. The footpath has a more open section at its western end where it takes a 'right-angled' turn to meet with Stow Lane, leaving open views towards the south (there is an intervening hedgerow to each side of Stow Lane between the Site/Sites and this location, which closes down some visibility). New planting along the northeast boundaries of the Cottam 1 South Site/Sites will curtail views in Year 1 and help close down visbility in Year 15.
Laug/32/1	1 Cottam 3a option area	557	N	N	LCC-C-U	Public Footpath: Located to the north of the settlement of Blyton. The footpath heads from the junction with Sandbeck Lane, then taking a northerly direction with a minor angled turn passing Willow Tree Farm and its associated reservoir. The footpath crosses over Laughton Highland Drain then heads north passing the sewage works then meeting with Blyton Road. The southern section of the footpath is partially enclosed and bordered by tree cover and hedgerows associated with Willow Tree Farm. The northern section of the footpath is also bordered by a strong hedgerow network.	Not applicable	No	No visibility towards the Cottam 3b Site/Sites due to the intervening settlement of Blyton and the strong hedgerow network with good tree cover.
Mton/66/1	1 Abnormal loads access	824	N	N	n/a	Public Footpath: Located to the west of the settlement of Marton. The Not applicable	Not applicable	No	Some notantial visibility towards Abnormal
Mton/66/1	1 Shared cable corridor and access	587		14	1.1/4	footpath heads from Littleborough Lane at Ferry Farm Landing Stage,	Not applicable	140	Some potential visibility towards Abnormal Loads Access and Shared Cable Corridor and
Mton/66/2	1 Abnormal loads access	797				then following the eastern bank of the River Trent it then continues			Access, but due to the temporary nature of the
Mton/66/2	1 Shared cable corridor and access	611				towards the small settlement of Trent Port. The footpath then diverts			construction works the effects would be
Mton/66/3	1 Abnormal loads access	661				its course in a diagobnal alignment away from the river corridor to			limited.
Mton/66/3	1 Shared cable corridor and access	339				meet with the A156 (High Street).			
Mton/66/4	1 Abnormal loads access	653							
Mton/66/4	1 Shared cable corridor and access	0							
Mton/67/1	1 Abnormal loads access	797	N	N	n/a	Public Footpath: Located to the west of the settlement of Marton. The footpath heads from Littleborough Lane, then meeting with the eastern bank of the River Trent it then continues towards the small settlement of Trent Port to meet with footpath (Mlton 66/1 and Mlton/66/3).	Not applicable	No	Some potential visibility towards Abnormal Loads Access, but due to the temporary nature of the construction works the effects would be limited.

Mton/68/1	1 Shared cable corridor and access	0			n/a	The footpath heads from the A156 (High Street) in an east west alignment to meet with the A1500 (Stow Park Road).				Cable Corridor Access and Shared Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited.
Mton/69/1	1 Abnormal loads access	230	N	N	n/a	Public Footpath: Located to the north of the settlement of Marton.	Not applicable	Not applicable	No	Some potential visibility towards Abnormal
Mton/69/1 Mton/69/1	1 High voltage cable corridor and access 1 Shared cable corridor and access	805 292		·		The footpath heads from the A1500 (Stow Park Road) in an northerly direction to meet with Willingham Road at Willingham Hill.	тес орржение	Тосторрисами		Loads Access, High Voltage Cable Corridor Access and Shared Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited.
Mton/823/1	1 Abnormal loads access	688	N	N	n/a	Public Footpath and Byway Open to all Traffic: Located to the west of the settlement of Marton. The footpath follows the east bank of the	Not applicable	Not applicable	No	Some potential visibility towards Abnormal Loads Access and Shared Cable Corridor and
Mton/823/1	1 Shared cable corridor and access	345				River Trent and there are two routes which run parallel before they meet with the Byway Open to all Traffic (BOAT) which then connects with the slipway at the small settlement of Trent Port.				Access, but due to the temporary nature of the construction works the effects would be limited.
Mton/824/1	4 Abnormal loads access	688	N	N	n/a	Public Footpath and Byway Open to all Traffic: Located to the west of	Not applicable	Not applicable	No	Some potential visibility towards Abnormal
Mton/824/1	4 Shared cable corridor and access	345			11/4	the settlement of Marton. The footpath follows the east bank of the	Trot applicable	140t applicable		Loads Access and Shared Cable Corridor and
Mton/824/2	4 Abnormal loads access	678				River Trent and there are two routes which run parallel before they				Access, but due to the temporary nature of the
Mton/824/2	4 Shared cable corridor and access	341				meet with the Byway Open to all Traffic (BOAT) which then connects				construction works the effects would be
Mton/824/3	4 Abnormal loads access	653				with the slipway at the small settlement of Trent Port.				limited.
Mton/824/3	4 Shared cable corridor and access	331				with the slipway at the small settlement of frent Fort.				illilited.
INILUII/824/3	4 Shared cable corridor and access	331								
Nthp/504/1	4 Cottam 3a option area	613	N	N	VP66	Byway Open to all Traffic: Located to the northwest of the small	Not applicable	Not applicable	No	Limited visibility towards the Cottam 3a
Nthp/504/2	4 Cottam 3a option area	615				settlement of Northorpe. The BOAT heads from Grange Farm and follows a north south direction to meet with a farm access track to the south of Scotton Nature Reserve. The southern section of the BOAT is partly enclosed by the slightly undulating landform and there are a few hedgerow trees. The northern section is open due to the absence of field hedgerows.				Site/Sites due to the distance, slightly undulating landform and intervening hedgerows.
Pilh/20/1	1 Cottam 3a option area	930	Υ	٧	VP56	Public Footpath: Located to the northeast of the small settlement of	Panels set back	Planting (where	No	Some potential visibility towards High Voltage
Pilh/20/1	1 Cottam 3b option area	0		,		Pilham. The footpath heads from Station Road in an east west	(where there is a	there is a shared		Cable Corridor and Access, but due to the
Pilh/20/1	1 High voltage cable corridor and access	192				direction to meet with Bonsall Road just to the north of Bonsdale	shared boundary with	boundary with the		temporary nature of the construction works
						Farm. The western and mid-section of the footpath is bordered by strong hedgerows and mature tree cover to each side. The eastern section of the footpath is open due to the low cut hedgerows and absence of hedgerow trees.	the footpath) from north and south boundaries of the Cottam 3b Site/Sites.	footpath) bordering the north and south boundaries of the Cottam 3b Site/Sites.		the effects would be limited. No visibility towards the Cottam 3a Site/Sites due to the intervening vegetation along the mainline railway and the strong hedgerow network to the north of the footpath. Open visibility towards the Cottam 3b South Site/Sites due to the the absence of intervening hedgerows and woodland cover along the route (eastern section). New planting along the east and west boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.
Scmp/196/1	1 Cottam 1 option area	895	N	N	VP3	Public Footpath: Located to the southeast of the settlement of Sturton by Stow. The footpath heads from the small settlement of Broxholme and follows a 'zig-zag' alignment (north south direction) passing across a tributary of the River Till to meet with the A1500 (Till Bridge Lane) just to the west of Tillbridge Farm.	Not applicable	Not applicable	No	No visibility towards the Cottam 1 South Site/Sites due to the distance, flat, low-lying landform, intervening hedgerows and settlement.
Scmp/31/1	2 Cottam 1 option area	800	N	N	VP3	Public Bridleway: Located to the southeast of the settlement of	Not applicable	Not applicable	No	No visibility towards the Cottam 1 South
						Sturton by Stow. The bridleway heads from the A1500 (Till Bridge Lane) just to the northeast of Tillbridge Farm as a short straight section to meet with bridleway (TLFe/31/1). The bridleway then continues further north in a meandering alignment to meet with Thorpe Lane at Thorpe Bridge.				Site/Sites due to the distance, flat, low-lying landform, intervening hedgerows and settlement.
Scmp/32/1	1 Cottam 1 option area	769	N	N	VP3	Public Footpath: Located to the southeast of the settlement of Sturton by Stow. The footpath heads from the A1500 (Till Bridge Lane) just to the northwest of Tillbridge Farm as a very short straight section to meet with footpath (TLFe/31/1). The footpath then continues further north in a meandering alignment (following the eastern bank of the River Till) to meet with Thorpe Lane at Thorpe Bridge.	inot applicable	Not applicable	No	No visibility towards the Cottam 1 South Site/Sites due to the distance, flat, low-lying landform, intervening hedgerows and settlement.
Stow/70/1	2 Abnormal loads access	948	N	N	n/a	Public Bridleway: Located to the northwest of the settlement of Stow.	Not applicable	Not applicable	No	Some potential visibility towards the Abnormal
Stow/70/1	2 Cottam 1 option area	845			1	The bridleway heads from Wooden Lane to meet with Marton Road	11255			Loads Access and High Voltage Cable Corridor
Stow/70/1	2 Cottam 1 permissive path	975	I			where its takes a 'right-angled' turn to then join Willingham Road. The				and Access, but due to the temporary nature of
Stow/70/1	2 High voltage cable corridor and access	40				southern section of the bridleway follows a minor track and is bordered to the west by a low-cut hedgerow with few trees. The northern section of the bridleway shares the route with a private farm access and is bordered by a low cut hedgerow to the west (which supports some regular tree cover). There are open views towards the east from the bridleway.				the construction works the effects would be limited. No visibility towards the Cottam 1 North and Cottam 1 South Site/Sites due to the distance, flat, low-lying landform, intervening settlement of Stow and the strong hedgerow network.
Stow/71/1	1 Abnormal loads access	125	N	N	LCC-C-A	Public Footpath: Located to the southwest of the settlement of Stow.	Not applicable	Not applicable	No	No visibility towards the Abnormal Loads
Stow/71/1	1 Cottam 1 option area	832	I			The footpath heads in a north south direction from Stow Park Road to				Access and High Voltage Cable Corridor and
Stow/71/1	1 Cottam 1 permissive path	290	I			then meet with footpath (71/3) which extends as far as Mere House to				Access due to the intervening built settlement
Stow/71/1	1 High voltage cable corridor and access	457			ti e	then meet with footpath (71/3) which extends as far as were nouse to then meet with footpath (Stur/71/4). This section of the footpath is enclosed by tree cover bordering the route and mature trees within nearby gardens.				of Stow and the mature tree cover bordering the bridleway to the north.

Stow/71/2										
	1 Abnormal loads access	255	N	N	LCC-C-A	Public Footpath: Located to the southwest of the settlement of Stow. The footpath heads in an east west direction from footpaths (Stow/71/2 and 71/3). This section of the footpath is open where it passes across the large-scale arable fields. The woodland blocks between the fields add some enclosure and help to curtail views east	Not applicable	Not applicable	No	No visibility towards the Abnormal Loads Access and High Voltage Cable Corridor and Access due to the intervening built settlement of Stow and the mature tree cover bordering the bridleway to the north.
Stow/71/2	1 Cottam 1 option area	978				west.				
Stow/71/2	1 Cottam 1 permissive path	413								
Stow/71/3	1 Abnormal loads access	255	N	N	LCC-C-A	Public Footpath: Located to the southwest of the settlement of Stow. The footpath heads in a north south direction from Stow Park Road to then meet with footpath (Stow/71/1) which extends as far as Stow Park Road. This section of the footpath is enclosed by tree cover bordering the route and mature trees within nearby gardensThe southern section of the bridleway is open due to the absence of bordering hedgerows and the large-scale field systems.	Not applicable	Not applicable	No	No visibility towards the Abnormal Loads Access due to the intervening built settlement of Stow and the mature tree cover bordering the bridleway to the north.
Stow/71/3	1 Cottam 1 option area	978								
Stow/71/3	1 Cottam 1 permissive path	413								
Stow/71/3	1 High voltage cable corridor and access	458								
5.5.17,7.275	I mg. ronage cable comac and access	.50								
Stow/72/1	1 Abnormal loads access	220	N	N	LCC-C-A	Public Footpath: Located to the east of the settlement of Stow. The	Not applicable	Not applicable	No	No visibility towards the Abnormal Loads
Stow/72/1	1 Cottam 1 option area	737				footpath heads in a north south direction from Ingham Road as far as				Access and High Voltage Cable Corridor and
Stow/72/1	1 Cottam 1 permissive path	181				the parish boundary to then meet with footpath (Stur/72/3). The				Access due to the intervening built settlement
Stow/72/1	1 High voltage cable corridor and access	881				northern section of the footpath is enclosed by tree cover bordering				of Stow and the strong hedgerow network with
						the route and mature trees within nearby gardens. The southern section of the bridleway is open due to the absence of bordering hedgerows and the large-scale field systems.				mature tree cover. Limited visibility towards the Cottam 1 North and Cottam 1 South Site/Sites due to the distance, flat, low-lying landform and the strong hedgerow network.
Stow/83/1	1 Cable corridor and access	482	Y	Υ	VP18 and VP21	Public Footpath: Located to the east of the settlement of Stow and to	Panels set back from	New planting	No	Limited visibility towards the Cable Corridor
Stow/83/1	1 Cottam 1 option area	n	.			1 '		bordering the		and Access due to the distance, the shelterbelt
Stow/83/1	1 Cottam 1 permissive path	678				· 1	Cottam 1 South	northern boundary		to the west and the vegetation bordering the
51611, 65, 1	2 Cottom 2 permissive patri	575					Site/Sites and from	of Cottam 1 South		River Till. Some visibility towards the Cottam 1
						passing Presswood Cottages to then meet with footpath (Ingh/26/3) at 1	-	Site/Sites and the		North and Cottam 1 South Site/Sites due to the
								· ·		
						1 - 1	ooundary of the	southern boundary		open nature of the southern section of the
						crosses an open field, but the tall shelterbelt to the west and the	Cottam 1 North	of the Cottam 1		footpath and lack of a strong hedgerow
						riparian vegetation along the River Till help close down views in this	Site/Sites.	North Site/Sites.		network and tree cover. New planting along
						direction. There are open views towards the east but the small				the north and east boundaries of the Site/Sites
						woodland blocks (including Coates Gorse) help to curtail distant views.				will curtail visibility in Year 1 and help close
						woodiand blocks (including coates corse) help to cartain distant views.				down views in Year 15.
										down views in real 15.
Charles In Section 14	10 11				100.04	Public Franchistance of the control	Makasak II	Not and the		Company and a state of the stat
Stow/845/1	1 Abnormal loads access	17	N	N	LCC-C-A	1 1	Not applicable	Not applicable	No	Some potential visibility towards High Voltage
Stow/845/1	1 Cottam 1 option area	742				route that connects Church Road with Normanby Road. This is a very				Cable Corridor and Access and Abnormal
Stow/845/1	1 Cottam 1 permissive path	177				short section of footpath that is fully contained by the built areas of				Loads, but due to the temporary nature of the
Stow/845/1	1 High voltage cable corridor and access	540				the settlement.				construction works the effects would be limited.
Stur/71/4	1 Abnormal loads access	652	N	N	VP9	Public Footpath: Located to the northwest of the settlement of	Not applicable	Not applicable	No	No visibility towards Abnormal Loads Access
Stur/71/4	1 Cottam 1 permissive path	777				Sturton by Stow. The footpath heads from its junction with footpath				and High Voltage Cable Corridor and Access
Stur/71/4	1 High voltage cable corridor and access	715				(Stur/71/3) passing Village Farm and Orchard Farm and extending as				due to the intervening settlement of Sturton by
, ,						far as Mere House where it meets with footpath (Stow/71/3).				Stow. No visibility towards the Cottam 1 South
						is as mere nouse where it meets with rootpath (stony / 2/ 5/)				Site/Sites due to the intervening settlement of
										1
St	4 Cathan 4 antian and	000	.,	.,	1,100					Sturton by Stow.
Stur/72/1	1 Cottam 1 option area	986	Y	Y	VP9	Public Footpath: Located to the northeast of the settlement of Sturton I		New planting	No	No visibility towards Abnormal Loads Access
Stur/72/2	1 Cottam 1 option area	976	l			by Stow. The footpath heads from Fleets Road in a northerly direction		-		due to the intervening settlement of Sturton by
Stur/72/3	1 Abnormal loads access	867	l			where it then meets with footpath (Stur72/2) then passing Sturton by		southwest		Stow. Some visibility towards Cottam 1 South
Stur/72/3	1 Cottam 1 option area	864	l				Site/Sites.	boundaries of the		Site/Sites, but the distance and intervening
		636	l			boundary. The southern section of the footpath is enclosed by built		Cottam 1 South		hedgerow cover curtials some views. New
Stur/72/3	1 Cottam 1 permissive path	999	I	1	1			Site/Sites.		planting along the southwest boundaries of the
	1 Cottam 1 permissive path		I			development as far as the primary school, when the footpath then		l		1
	1 Cottam 1 permissive path					development as far as the primary school, when the footpath then follows an open section with views towards the east.		I		Site/Sites will curtail visibility in Year 1 and help
	1 Cottam 1 permissive path									close down views in Year 15.
	1 Cottam 1 permissive path									
Stur/72/3				v	V010 and CC C-C	follows an open section with views towards the east.	Danale cot hack from	Now planting	No.	close down views in Year 15.
Stur/72/3 Stur/73/1	1 Cable corridor and access	294	Y	Y	VP10 and LCC-C=C	follows an open section with views towards the east.  Public Footpath: Located to the northeast of the settlement of Sturton		New planting	No	close down views in Year 15.  No visibility towards Cable Corridor and Access
Stur/72/3  Stur/73/1  Stur/73/1	1 Cable corridor and access 1 Cottam 1 option area	294 17	Y	Y	VP10 and LCC-C=C	follows an open section with views towards the east.  Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath	southeast soundaries	bordering the	No	close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by
Stur/72/3 Stur/73/1	1 Cable corridor and access	294	Y	Y	VP10 and LCC-C=C	follows an open section with views towards the east.  Public Footpath: Located to the northeast of the settlement of Sturton	southeast soundaries		No	close down views in Year 15.  No visibility towards Cable Corridor and Access
Stur/72/3  Stur/73/1  Stur/73/1	1 Cable corridor and access 1 Cottam 1 option area	294 17	Y	Y	VP10 and LCC-C=C	follows an open section with views towards the east.  Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath	southeast soundaries of Cottam 1 South	bordering the	No	close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by
Stur/72/3  Stur/73/1  Stur/73/1	1 Cable corridor and access 1 Cottam 1 option area	294 17	Y	Y	VP10 and LCC-C=C	Follows an open section with views towards the east.  Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with	southeast soundaries of Cottam 1 South	bordering the southwest	No	close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of
Stur/72/3  Stur/73/1  Stur/73/1	1 Cable corridor and access 1 Cottam 1 option area	294 17	Υ	Y	VP10 and LCC-C=C	Follows an open section with views towards the east.  Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape is	southeast soundaries of Cottam 1 South	bordering the southwest boundaries of the	No	close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover,
Stur/72/3  Stur/73/1  Stur/73/1	1 Cable corridor and access 1 Cottam 1 option area	294 17	Y	Y	VP10 and LCC-C=C	Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility	southeast soundaries of Cottam 1 South	bordering the southwest boundaries of the Cottam 1 South	No	close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction.
Stur/72/3  Stur/73/1  Stur/73/1	1 Cable corridor and access 1 Cottam 1 option area	294 17	Y	Y	VP10 and LCC-C=C	Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility	southeast soundaries of Cottam 1 South	bordering the southwest boundaries of the Cottam 1 South	No	Close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening
Stur/72/3  Stur/73/1  Stur/73/1	1 Cable corridor and access 1 Cottam 1 option area	294 17	Y	Y	VP10 and LCC-C=C	Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility	southeast soundaries of Cottam 1 South	bordering the southwest boundaries of the Cottam 1 South	No	close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover curtials some views. New
Stur/72/3  Stur/73/1  Stur/73/1	1 Cable corridor and access 1 Cottam 1 option area	294 17	Y	Y	VP10 and LCC-C=C	Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility	southeast soundaries of Cottam 1 South	bordering the southwest boundaries of the Cottam 1 South	No	close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover curtials some views. New planting along the southwest boundaries of the
Stur/72/3  Stur/73/1  Stur/73/1	1 Cable corridor and access 1 Cottam 1 option area	294 17	Y	Y	VP10 and LCC-C=C	Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility	southeast soundaries of Cottam 1 South	bordering the southwest boundaries of the Cottam 1 South	No	close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover curtials some views. New planting along the southwest boundaries of the Site/Sites will curtail visibility in Year 1 and help
Stur/72/3  Stur/73/1  Stur/73/1	1 Cable corridor and access 1 Cottam 1 option area	294 17	Y	Y	VP10 and LCC-C=C	Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility	southeast soundaries of Cottam 1 South	bordering the southwest boundaries of the Cottam 1 South	No	close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover curtials some views. New planting along the southwest boundaries of the
Stur/72/3  Stur/73/1  Stur/73/1  Stur/73/1	1 Cable corridor and access 1 Cottam 1 option area 1 Cottam 1 permissive path	294 17 646	·			Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility towards the east and southeast.	southeast soundaries of Cottam 1 South Site/Sites.	bordering the southwest boundaries of the Cottam 1 South Site/Sites.		close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover curtials some views. New planting along the southwest boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.
Stur/72/3  Stur/73/1  Stur/73/1	1 Cable corridor and access 1 Cottam 1 option area	294 17	Y	Y	VP10 and LCC-C=C	Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility towards the east and southeast.  Public Footpath: Located within the settlement of Sturton by Stow.	southeast soundaries of Cottam 1 South	bordering the southwest boundaries of the Cottam 1 South	No	close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover curtials some views. New planting along the southwest boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.
Stur/72/3  Stur/73/1  Stur/73/1  Stur/73/1	1 Cable corridor and access 1 Cottam 1 option area 1 Cottam 1 permissive path	294 17 646	·			Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility towards the east and southeast.	southeast soundaries of Cottam 1 South Site/Sites.	bordering the southwest boundaries of the Cottam 1 South Site/Sites.		close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover curtials some views. New planting along the southwest boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.
Stur/72/3  Stur/73/1  Stur/73/1  Stur/73/1  Stur/76/1	1 Cable corridor and access 1 Cottam 1 option area 1 Cottam 1 permissive path  1 Cottam 1 option area	294 17 646	·		VP9	Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility towards the east and southeast.  Public Footpath: Located within the settlement of Sturton by Stow. The footpath follows a route that links High Street with Twitchell and is bordered by residential properties to each side.	southeast soundaries of Cottam 1 South Site/Sites.	bordering the southwest boundaries of the Cottam 1 South Site/Sites.		close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover curtials some views. New planting along the southwest boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.  No visibility towards the Cottam 1 South Site/Sites due to the intervening settlement of Sturton by Stow.
Stur/72/3  Stur/73/1  Stur/73/1  Stur/73/1  Stur/76/1  Stur/77/1	1 Cable corridor and access 1 Cottam 1 option area 1 Cottam 1 permissive path	294 17 646	·			Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility towards the east and southeast.  Public Footpath: Located within the settlement of Sturton by Stow. The footpath follows a route that links High Street with Twitchell and is bordered by residential properties to each side.	southeast soundaries of Cottam 1 South Site/Sites.	bordering the southwest boundaries of the Cottam 1 South Site/Sites.		close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover curtials some views. New planting along the southwest boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.  No visibility towards the Cottam 1 South Site/Sites due to the intervening settlement of
Stur/72/3  Stur/73/1  Stur/73/1  Stur/73/1  Stur/76/1	1 Cable corridor and access 1 Cottam 1 option area 1 Cottam 1 permissive path  1 Cottam 1 option area	294 17 646	N N	N	VP9	Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility towards the east and southeast.  Public Footpath: Located within the settlement of Sturton by Stow. The footpath follows a route that links High Street with Twitchell and is bordered by residential properties to each side.	southeast soundaries of Cottam 1 South Site/Sites.	bordering the southwest boundaries of the Cottam 1 South Site/Sites.	No	close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover curtials some views. New planting along the southwest boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.  No visibility towards the Cottam 1 South Site/Sites due to the intervening settlement of Sturton by Stow.
Stur/72/3  Stur/73/1  Stur/73/1  Stur/73/1  Stur/76/1  Stur/77/1	1 Cable corridor and access 1 Cottam 1 option area 1 Cottam 1 permissive path  1 Cottam 1 option area 1 Cottam 1 option area	294 17 646	N N	N	VP9	Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility towards the east and southeast.  Public Footpath: Located within the settlement of Sturton by Stow. The footpath follows a route that links High Street with Twitchell and is bordered by residential properties to each side.  Public Footpath: Located within the settlement of Sturton by Stow. The footpath follows a route that links Fleet's Road with the A1500	southeast soundaries of Cottam 1 South Site/Sites.	bordering the southwest boundaries of the Cottam 1 South Site/Sites.	No	close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover curtials some views. New planting along the southwest boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.  No visibility towards the Cottam 1 South Site/Sites due to the intervening settlement of Sturton by Stow.  No visibility towards the Cottam 1 South Site/Sites due to the intervening settlement of
Stur/72/3  Stur/73/1  Stur/73/1  Stur/73/1  Stur/76/1  Stur/77/1	1 Cable corridor and access 1 Cottam 1 option area 1 Cottam 1 permissive path  1 Cottam 1 option area 1 Cottam 1 option area	294 17 646	N N	N	VP9	Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility towards the east and southeast.  Public Footpath: Located within the settlement of Sturton by Stow. The footpath follows a route that links High Street with Twitchell and is bordered by residential properties to each side.	southeast soundaries of Cottam 1 South Site/Sites.	bordering the southwest boundaries of the Cottam 1 South Site/Sites.	No	close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover curtials some views. New planting along the southwest boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.  No visibility towards the Cottam 1 South Site/Sites due to the intervening settlement of Sturton by Stow.
Stur/72/3  Stur/73/1  Stur/73/1  Stur/73/1  Stur/76/1  Stur/77/1  Stur/77/2	1 Cable corridor and access 1 Cottam 1 option area 1 Cottam 1 permissive path  1 Cottam 1 option area 1 Cottam 1 option area 1 Cottam 1 option area 1 Cottam 1 option area	294 17 646 999 951 979	N N	N N	VP9	Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility towards the east and southeast.  Public Footpath: Located within the settlement of Sturton by Stow. The footpath follows a route that links High Street with Twitchell and is bordered by residential properties to each side.  Public Footpath: Located within the settlement of Sturton by Stow. The footpath follows a route that links Fleet's Road with the A1500 (Marton Road) and is bordered by residential properties to each side.	southeast soundaries of Cottam 1 South Site/Sites.  Not applicable  Not applicable	bordering the southwest boundaries of the Cottam 1 South Site/Sites.  Not applicable  Not applicable	No No	close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover curtials some views. New planting along the southwest boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.  No visibility towards the Cottam 1 South Site/Sites due to the intervening settlement of Sturton by Stow.  No visibility towards the Cottam 1 South Site/Sites due to the intervening settlement of Sturton by Stow.
Stur/72/3  Stur/73/1  Stur/73/1  Stur/73/1  Stur/77/1	1 Cable corridor and access 1 Cottam 1 option area 1 Cottam 1 permissive path  1 Cottam 1 option area 1 Cottam 1 option area	294 17 646	N N	N	VP9	Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility towards the east and southeast.  Public Footpath: Located within the settlement of Sturton by Stow. The footpath follows a route that links High Street with Twitchell and is bordered by residential properties to each side.  Public Footpath: Located within the settlement of Sturton by Stow. The footpath follows a route that links Fleet's Road with the A1500	southeast soundaries of Cottam 1 South Site/Sites.  Not applicable  Not applicable	bordering the southwest boundaries of the Cottam 1 South Site/Sites.	No	close down views in Year 15.  No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover curtials some views. New planting along the southwest boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.  No visibility towards the Cottam 1 South Site/Sites due to the intervening settlement of Sturton by Stow.  No visibility towards the Cottam 1 South Site/Sites due to the intervening settlement of

Stur/79/3	1 Cottam 1 option area	845				recreation ground and the residential edge, then taking a diagonal alignment across the open arable field to meet with the A1500 (Tillbridge Road). The northern section of the footpath is enclosed, but the southern section is open with views towards the east and northeast.				Thorpe Lane (where it joins with the A1500/TillbridgeRoad). Tree cover bordering the recreation ground and other hedgerow trees to the southeast help curtail views toward the east and northeast.
Stur/80/1 Stur/80/1	1 Cable corridor and access 1 Cottam 1 option area	0	Y	Y	VP8	Stow. The footpath heads from Fleet's Road passing across an open arable field to meet with Thorpe Lane. This is a very short section of	Panels set back from southwest boundaries of Cottam 1 South Site/Sites.	New planting bordering the southwest boundaries of the Cottam 1 South Site/Sites.	No	Open visibility towards the Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover closes down some views. New planting along the southeast boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.
TLFe/31/1	2 Cable corridor and access	832	Y	Υ	VP3	Public Bridleway: Located to the east of the settlement of Sturton by	Panels set back from	New planting on the	No	Oblique visibility towards the Cable Corridor
TLFe/31/1	2 Cottam 1 option area	118			VP3	<del></del> ' '	south boundaries of	south boundaries of		and Access, but due to the temporary nature of
TLFe/31/2 TLFe/31/2	2   Cable corridor and access 2   Cottam 1 option area	767 0			VP5 and VP11 VP5 and VP11		Cottam 1 South Site/Sites.	Cottam 1 South Site/Sites.		the construction works the effects would be limited. Some oblique visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover closes down some views. New planting along the south boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.
TLFe/32/1	1 Cable corridor and access	680	Y	Υ	VP7	Public Footpath: Located to the east of the settlement of Sturton by	Panels set back from	New planting on the	No	Partly open visibility towards the Cable
TLFe/32/1	1 Cottam 1 option area	10	·	·		Stow. The footpath heads from Thorpe Lane at Thorpe Bridge and then continues further south in a meandering alignment (following the	south boudaries of	south boundaries of the Cottam 1 South Site/Sites.	, ac	Corridor and Access, but due to the temporary nature of the construction works the effects would be limited.Partly open visibility towards Cottam 1 South Site/Sites, but the distance and intervening tree cover to the south side of Thorpe Lane closes down some views. New planting along the south boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15
Wlgm/515/1	1 Abnormal loads access	217	N	N	n/a	, · · · · · · · · · · · · · · · · · · ·	Not applicable	Not applicable	No	No visibility towards the Abnormal Loads
Wlgm/515/1	1 Cottam 1 option area	786				centre. The footpath follows a route from High Street, passing Reynard Church Hall, to meet with Grange Lane.				Access due to intervening built form. No visibility towards the Cottam 1 South Site/Sites due to the intervening settlement of Sturton by Stow.
Wlgm/538/1	1 Abnormal loads access	15	Y	Y	n/a	Willingham by Stow. The footpath heads from Fillingham Lane passing		New planting on the north and west	No	Some visibility towards the Abnormal Loads Access (short section on Cot Garth Lane of
Wigm/538/1	1 Cottam 1 option area	292				meet with Cot Garth Lane in the south. The northern section of the	boundaries of the Cottam 1 North Site/Sites.	boundaries of the Cottam 1 North Site/Sites.		approximatly 70m), but due to the temporary nature of the construction works the effects would be limited. Some minor visibility towards the Cottam 1 South Site/Sites due to the intervening hedgerows and individual tree cover bordering Cot Garth Lane and Stone Pit Lane. New planting along the north and west boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.
Wlgm/59/1	1 Abnormal loads access	593	N	N	n/a	Public Footpath: Located to the north of the settlement of Willingham by Stow. The footpath heads north from its junction with footpaths (Wlgm/59/3 and Wlgm/59/5) to meet with footpath (Kexb/59/4) at the parish boundary.	Not applicable	Not applicable	No	No visibility towards the Abnormal Loads Access due to intervening built form within the settlement of Sturton by Stow.
Wlgm/59/2	1 Abnormal loads access	576	N	N	n/a		Not applicable	Not applicable	No	No visibility towards the Abnormal Loads Access due to intervening built form within the settlement of Sturton by Stow.
Wlgm/59/3	1 Abnormal loads access	465	N	N	n/a	Public Footpath: Located to the northwest of the settlement of Willingham by Stow. The footpath heads in an almost north south direction from High Street for a short section (approximatly 170m) to meet with footpath (Wlgm/59/2). The footpath is enclosed by built form, except for its northern section at the junction with Wlgm/59/2 where visibility is focussed towards the north and west.	Not applicable	Not applicable	No	No visibility towards the Abnormal Loads Access due to intervening built form within the settlement of Sturton by Stow.
Wigm/59/4	1 Abnormal loads access	425								

Wlgm/59/5	1	Abnormal loads access	460	N	N	n/a	Public Footpath: Located to the north of the settlement of Willingham by Stow. The footpath heads in an almost 'diagonal' direction from High Street for a short section (approximatly 170m) to meet with footpath (Wlgm/59/2). The footpath is enclosed by built form, except for its northern section at the junction with Wlgm/59/2 where visibility is focussed towards the north and west.	Not applicable	Not applicable	No	No visibility towards the Abnormal Loads Access due to intervening built form within the settlement of Sturton by Stow.
Wlgm/59/5	1	Cottam 1 option area	869								
Wlgm/59/6	1	Abnormal loads access	435								
Wlgm/59/6	1	Cottam 1 option area	858								
Wlgm/61/1	1	Abnormal loads access	582	N	N	n/a	Public Footpath: Located within the settlement of Willingham to the northwest	Not applicable	Not applicable	No	No visibility towards the Abnormal Loads Access due to intervening built form within the settlement of Sturton by Stow.
Wlgm/62/1	1	Abnormal loads access	465	N	N	n/a	Public Footpath: Located to the northwest of the settlement of Willingham by Stow. The footpath heads in a diagonal direction from the junction with footpath (Wlgm/59/3) for a short section (approximatly 160m) to meet with footpath (Wlgm/59/3) and the B1241.	Not applicable	Not applicable	No	No visibility towards the Abnormal Loads Access due to intervening built form within the settlement of Sturton by Stow.
Wlgm/63/1	1	Abnormal loads access	214	N	N	n/a	Public Footpath: Located within the settlement of Willingham by Stow. The footpath heads from Stow Road for a very short section to link with Grange Lane.	Not applicable	Not applicable	No	No visibility towards the Abnormal Loads Access due to intervening built form within the settlement of Sturton by Stow.
Wlgm/63/1	1	Cottam 1 option area	826								
Wlgm/64/1	1	Abnormal loads access	213	N	N	n/a	Public Footpath: Located to the southwest of the settlement of Wilingham by Stow. The footpath heads from Stow Road in an almost 'diagonal' direction to meet with Marton Road.	Not applicable	Not applicable	No	No visibility towards the Abnormal Loads Access due to intervening built form within the settlement of Sturton by Stow.
Wlgm/64/1	1	Cottam 1 option area	916								
Wlgm/64/2	1	Abnormal loads access	289								
Wlgm/881/1	1	Abnormal loads access	422	N	N	n/a	Public Footpath: Located within the settlement of Willingham by Stow to the northeast part. The footpath heads from High Street for a short section to join with footpath (Wlgm/59/5).	Not applicable	Not applicable	No	No visibility towards the Abnormal Loads Access due to intervening built form within the settlement of Sturton by Stow.
Wlgm/881/1	1	Cottam 1 option area	769								
Wlgm/976/1		L Abnormal loads access	98	N	N	n/a	Public Footpath: Located within the settlement of Willingham to the southwest part. The footpath heads from Park Road across a grassland field with groups of trees toeards the south boundary.	Not applicable	Not applicable	No	No visibility towards the Abnormal Loads Access or the Cottam 1 North Site/Sites due to intervening built form within the settlement of
Wigniy 970/1	1	Abiliotifidi fodus access	96								Sturton by Stow.
Wlgm/976/1	1	Cottam 1 option area	920								
Wlgm/976/2	1	L Abnormal loads access	289								
NT Cottam BOAT5	BOAT	Shared cable corridor and access	238								
NT Cottam BW2	Bridleway	Shared cable corridor and access	3								
NT Cottam BW7	Bridleway	Shared cable corridor and access	168							-	
NT Cottam FP1 NT Cottam FP3	Footpath Footpath	Shared cable corridor and access Shared cable corridor and access	0			+			+	+	+
NT Cottam FP3	<u> </u>	Shared cable corridor and access  Shared cable corridor and access	0			+			1	+	+
NT Cottam RB6	Restricted Byway	Shared cable corridor and access	1							1	
NT North Leverton With Habblesthorpe FP9	Footpath	Abnormal loads access	834								
NT North Leverton With Habblesthorpe FP9	Footpath	Shared cable corridor and access	37								
NT North Leverton With Habblesthorpe RB25	Restricted Byway	Shared cable corridor and access	165								
NT Rampton BOAT12	BOAT	Shared cable corridor and access	0			-			1		
NT Rampton BOAT13	BOAT	Shared cable corridor and access	348			+			+	-	
NT Rampton FP10 NT Rampton FP20	Footpath Footpath	Shared cable corridor and access Shared cable corridor and access	348			+			+	+	+
NT Rampton FP4	Footpath	Abnormal loads access	959			+			+	+	+
NT Rampton FP4	Footpath	Shared cable corridor and access	347			1					
NT Rampton FP5	Footpath	Shared cable corridor and access	0								
NT Rampton FP9	Footpath	Shared cable corridor and access	354								
NT South Leverton BOAT16	BOAT	Shared cable corridor and access	0								

NT Treswell BW18	Bridleway	Shared cable corridor and access	119				
NT Treswell BW20	Bridleway	Shared cable corridor and access	132				
NT Treswell FP3	Footpath	Abnormal loads access	869				
NT Treswell FP3	Footpath	Shared cable corridor and access	154				
NT Treswell FP4	Footpath	Shared cable corridor and access	0				
NT Treswell FP5	Footpath	Shared cable corridor and access	0				



# Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.5.1: PRoW Receptors – PRoW Cumulative Developments [Reference: EN010133/APP/C6.3.8.3.5.1.2] January 2023

	Bumble Bee Farm	Field Farm	Gate Burton Energy Farm	High Marnham Solar	Tillbridge Solar	West Burton	Actual Visibility	Actual Visibility Justificantion
RouteCode								
Aist/37/1								Already Scoped Out
Aist/38/1								Already Scoped Out
Aist/38/2								Already Scoped Out
Aist/38/3								Already Scoped Out
Aist/39/1								Already Scoped Out
Aist/40/1								Already Scoped Out
Blyb/11/1								Already Scoped Out
Blyt/24/1								Already Scoped Out
Blyt/24/2								Already Scoped Out
Blyt/25/1								Already Scoped Out
Blyt/25/2								Already Scoped Out
Blyt/25/3								Already Scoped Out
Blyt/26/1								Already Scoped Out
Blyt/28/1								Already Scoped Out
Blyt/28/2								Already Scoped Out
Blyt/29/1								Already Scoped Out
Blyt/29/2								Already Scoped Out
Blyt/30/1								Already Scoped Out
Blyt/30/2								Already Scoped Out
Blyt/30/3								Already Scoped Out
Blyt/31/1								Already Scoped Out
Blyt/32/1								Already Scoped Out
Blyt/33/1								Already Scoped Out
Bram/66/1								Already Scoped Out
Camm/31/1	N	N	Y	N	Y	Y		Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Open visibility towards the Cottam 1 South Site/Sites due to the flat, low-lying landform and the absence of intervening hedgerows and woodland cover along parts of the route, particularly the southern section of the route. New planting along the east and west boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15 Due to poor visibility into Cottam 1 sites cumulative intervisibility cannot be achieved.

	N	N	Y	N	Y	N	Some potential visibility towards High Voltage Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards the Cottam 2 Site/Sites. The hedgerow bordering the south side of Pilham Lane and the intervening field hedgerows to the south of the lane are likely to close down visibility. The riparian vegetation bordering Corringham Beck and the flat, low-lying landform is also likely to curtail views. New planting along the northwest boundaries of the Cottam 2 Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15 Due to poor visibility into Cottam2 sites cumulative intervisibility cannot be achieved.
Corr/22/1	N	N	Y	N	Y	N	Some potential visibility towards High Voltage Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards the Cottam 2 Site/Sites. The hedgerow bordering the south side of Pilham Lane and the intervening field hedgerows to the south of the lane are likely to close down visibility. The riparian vegetation bordering Corringham Beck and the flat, low-lying landform is also likely to curtail views. New planting along the northwest boundaries of the Cottam 2 Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15 Due to poor visibility into Cottam2 sites cumulative intervisibility cannot be achieved.
Corr/22/3	N	N	Y	N	Y	N	Some potential visibility towards High Voltage Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards the Cottam 2 Site/Sites. The hedgerow bordering the south side of Pilham Lane and the intervening field hedgerows to the south of the lane are likely to close down visibility. The riparian vegetation bordering Corringham Beck and the flat, low-lying landform is also likely to curtail views. New planting along the northwest boundaries of the Cottam 2 Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15 Due to poor visibility into Cottam2 sites cumulative intervisibility cannot be achieved.
Corr/23/1							Already Scoped Out
Corr/23/2							Already Scoped Out
Corr/771/1							Already Scoped Out
FenW/97/1							Already Scoped Out

Fill/85/1	N	N	Y	N	Y	Y	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor Fill767, the receptor is approximately 6.8 km from West Burton, 5.5 km from Gate Burton Energy Farm and therefore has no potential intervisibility. The receptor is also 0.9 km from the nearest Tillbridge Solar site however, vegetation associated with nearby fields closes down views into the development sites. No views of cumulative developments - Scope Out.
Fill/85/2	N	N	Y	N	Y	Y	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor Fill767, the receptor is approximately 6.8 km from West Burton, 5.5 km from Gate Burton Energy Farm and therefore has no potential intervisibility. The receptor is also 0.9 km from the nearest Tillbridge Solar site however, vegetation associated with nearby fields closes down views into the development sites. No views of cumulative developments - Scope Out.
Fill/86/1	N	N	Y	N	Y	N	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor Fill86, the receptor is approximately 6.1 km from Gate Burton Energy Farm and therefore has no potential intervisibility. The receptor is also 2 km from the nearest Tillbridge Solar site however, dense vegetation associated with nearby fields and tributaries closes down views into the development sites. No views of cumulative developments - Scope Out.
Gltw/85/1	N	Y	Y	N	Y	Y	No	Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards the Cottam 1 North Site/Sites. There are few hedgerows and woodland cover and hedgerows are also absent leaving open views from the bridleway to each side. New planting along the east and west boundaries of the Site/Sites will curtial visibility in Year 1 and close down visibility in Year 15 Due to poor visibility into Cottam 1 cumulative intervisibility cannot be achieved.
Heap/1170/1								Already Scoped Out
Ingh/17/1								Already Scoped Out
Ingh/235/1								Already Scoped Out

logb/24/4	Y	Y	Y	N	Y	Υ	No	Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards the Cottam 1 North Site/Sites. There are few hedgerows and woodland cover and hedgerows are also absent leaving open views from the bridleway towards the west. New planting along the east boundaries of the Site/Sites will curtial views in Year 1 and close down visibility in Year 15 Due to poor visibility to Cottam 1 cumulative intervisibility cannot be achieved.
Ingh/24/1 Ingh/24/2	Y	Y	Y	N	Y	Y	No	Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards the Cottam 1 North Site/Sites. There are few hedgerows and woodland cover and hedgerows are also absent leaving open views from the bridleway towards the west. New planting along the east boundaries of the Site/Sites will curtial views in Year 1 and close down visibility in Year 15 Due to poor visibility to Cottam 1 cumulative intervisibility cannot be achieved.
Ingh/25/1								Already Scoped Out
	N	Y	Y	Y	Y	Y	No	Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Very minor visibility towards Cottam 1 North Site/Sites. There is an open boundary to the western most section of the footpath where it meets with footpath (Stow/83/1) leaving partially open views towards the west (there is an intervening north south boundary hedgerow between the Site/Sites and this location, which closes down some visibility). New planting along the southeast boundary of the Cottam 1 North Site/Sites at this location will curtail views in Year 1 and help close down visibility in Year 15 Due to poor visibility to Cottam 1 cumulative intervisibility cannot be achieved.
Ingh/26/2	N	Y	Y	Y	Y	Υ	No	Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Very minor visibility towards Cottam 1 North Site/Sites. There is an open boundary to the western most section of the footpath where it meets with footpath (Stow/83/1) leaving partially open views towards the west (there is an intervening north south boundary hedgerow between the Site/Sites and this location, which closes down some visibility). New planting along the southeast boundary of the Cottam 1 North Site/Sites at this location will curtail views in Year 1 and help close down visibility in Year 15 Due to poor visibility to Cottam 1 cumulative intervisibility cannot be achieved.

	T		l v	l v	· · ·	· · ·	I	10
Ingh/27/3	N	Y	T	T	Y	Y	No	Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards Cottam 1 South Site/Sites. The footpath has a more open section at its western end where it takes a 'right-angled' turn to meet with Stow Lane, leaving open views towards the south (there is an intervening hedgerow to each side of Stow Lane between the Site/Sites and this location, which closes down some visibility). New planting along the northeast boundaries of the Cottam 1 South Site/Sites will curtail views in Year 1 and help close down visibility in Year 15 Due to poor visibility towards Cottam 1 cumulative intervisibility cannot be achieved.
111811/27/3	N	Υ	Y	Υ	Y	Υ	No	Some potential visibility towards Cable Corridor and Access, but due to the
	IV						NO	temporary nature of the construction works the effects would be limited. Some visibility towards Cottam 1 South Site/Sites. The footpath has a more open section at its western end where it takes a 'right-angled' turn to meet with Stow Lane, leaving open views towards the south (there is an intervening hedgerow to each side of Stow Lane between the Site/Sites and this location, which closes down some visibility). New planting along the northeast boundaries of the Cottam 1 South Site/Sites will curtail views in Year 1 and help close down visbility in Year 15 Due to poor visibility towards Cottam 1 cumulative intervisibility cannot be achieved.
Ingh/27/4								
	N	Y	Y	Y	Y	Y	No	Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards Cottam 1 South Site/Sites. The footpath has a more open section at its western end where it takes a 'right-angled' turn to meet with Stow Lane, leaving open views towards the south (there is an intervening hedgerow to each side of Stow Lane between the Site/Sites and this location, which closes down some visibility). New planting along the northeast boundaries of the Cottam 1 South Site/Sites will curtail views in Year 1 and help close down visibility in Year 15 Due to poor visibility towards Cottam 1 cumulative intervisibility cannot be achieved.
Ingh/27/5								
Laug/32/1								Already Scoped Out
Mton/66/1						ļ	ļ	Already Scoped Out
Mton/66/2								Already Scoped Out
Mton/66/3								Already Scoped Out
Mton/66/4							ļ	Already Scoped Out
Mton/67/1					-		-	Already Scoped Out
Mton/68/1								Already Scoped Out
Mton/69/1								Already Scoped Out
Mton/823/1								Already Scoped Out
Mton/824/1								Already Scoped Out
Mton/824/2								Already Scoped Out
Mton/824/3							-	Already Scoped Out
Nthp/504/1							-	Already Scoped Out
Nthp/504/2								Already Scoped Out

Pilh/20/1	N	l N l	V	N	v	N	No	Though the cumulative developments cover a significant surface area and
	IN .		'	IN	У	IN	100	therefore have extensive zones of theoretical visibility, with the case of ground-
								mounted solar panels it should be noted that with effective screening and site-
								specific topgraphy the area of theoretical visibility could be zero. Specifically
								with receptor Pilh20, the receptor is approximately 8.4 km to Gate Burton
								Energy Farm, 3.3 km to Tillbridge Solar site and therefore has no potential
								intervisibility. No views of cumulative developments - Scope Out.
Scmp/196/1	N	N	Y	N	У	N	No	Though the cumulative developments cover a significant surface area and
								therefore have extensive zones of theoretical visibility, with the case of ground-
								mounted solar panels it should be noted that with effective screening and site-
								specific topgraphy the area of theoretical visibility could be zero. Specifically
								with receptor Pilh20, the receptor is approximately 8.4 km to Gate Burton
								Energy Farm, 3.3 km to Tillbridge Solar site and therefore has no potential
								intervisibility. No views of cumulative developments - Scope Out.
Scmp/31/1								Already Scoped Out
Stow/70/1								Already Scoped Out
Stow/71/1								Already Scoped Out
Stow/71/2								Already Scoped Out
Stow/71/3								Already Scoped Out
Stow/72/1								Already Scoped Out
Stow/83/1	N	Y	Υ	N	Y	Υ	No	Though the cumulative developments cover a significant surface area and
330, 33, 2					'	-		therefore have extensive zones of theoretical visibility, with the case of ground-
								mounted solar panels it should be noted that with effective screening and site-
								specific topgraphy the area of theoretical visibility could be zero. Specifically
								with receptor Stow83, the receptor is approximately 13.2 km from Field Farm,
								3.7 km from West Burton, 3.5 km from Gate Burton Energy Farm, 3.2 km from
								Tillbridge Solar site and therefore has no potential intervisibility. No views of
S: /0.45 /4								cumulative developments - Scope Out.
Stow/845/1								Already Scoped Out
Stur/71/4					<u> </u>			Already Scoped Out
	N	N	N	N	Y	Y	No	Some visibility towards Cottam 1 South Site/Sites, but the distance and
								intervening hedgerow cover curtials some views. New planting along the
								southwest boundaries of the Site/Sites will curtail visibility in Year 1 and help
								close down views in Year 15 Due to poor visibility towards Cottam 1
Stur/72/2								cumulative intervisibility cannot be achieved.
Stur/72/3	N	N	N	N	Y	Υ	No	Some visibility towards Cottam 1 South Site/Sites, but the distance and
								intervening hedgerow cover curtials some views. New planting along the
								southwest boundaries of the Site/Sites will curtail visibility in Year 1 and help
								close down views in Year 15 Due to poor visibility towards Cottam 1
								cumulative intervisibility cannot be achieved.
	N	N	N	N	Y	Υ	No	The meandering hedgerow to the east of the sewage works also supports tree
								cover, which helps close down views in this direction. Some visibility towards
								Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover
								curtials some views. New planting along the southwest boundaries of the
								Site/Sites will curtail visibility in Year 1 and help close down views in Year 15
								Due to poor visibility towards Cottam 1 South cumulative intervisibility cannot
  Stur/73/1								be achieved.
Stur/76/1					+			Already Scoped Out
Stur/77/1					+			Already Scoped Out
					+ -		<del> </del>	
Stur/77/2							L	Already Scoped Out

Stur/79/1								Already Scoped Out
Stur/79/2								Already Scoped Out
Stur/79/3								Already Scoped Out
Stur/80/1	N	N	N	N	Y	Y	No	Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover closes down some views. New planting along the southeast boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15 Due to poor visibility towards Cottam 1 South cumulative intervisibility cannot be achieved.
TLFe/31/1	N	Y	Υ	N	Y	Y	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor TLFe31, the receptor is approximately 14.3 km from Field Farm, 5.1 km from Tillbridge Solar site, 5 km from Gate Burton Energy Park and therefore has no potential intervisibility. The receptor is also 1.7 km from West Burton however, vegetation associated with nearby fields and tributaries as well as existing vegetation associated with Thorpe Le Fallows and Tillbridge Lane closes down views into the development sites. No views of cumulative developments - Scope Out.
	N	Y	Υ	N	Y	Y	No	Though the cumulative developments cover a significant surface area and therefore have extensive zones of theoretical visibility, with the case of ground-mounted solar panels it should be noted that with effective screening and site-specific topgraphy the area of theoretical visibility could be zero. Specifically with receptor TLFe31, the receptor is approximately 14.3 km from Field Farm, 5.1 km from Tillbridge Solar site, 5 km from Gate Burton Energy Park and therefore has no potential intervisibility. The receptor is also 1.7 km from West Burton however, vegetation associated with nearby fields and tributaries as well as existing vegetation associated with Thorpe Le Fallows and Tillbridge Lane closes down views into the development sites. No views of cumulative developments - Scope Out.
TLFe/31/2 TLFe/32/1	N	N	N	N	Y	Y	No	Partly open visibility towards Cottam 1 South Site/Sites, but the distance and intervening tree cover to the south side of Thorpe Lane closes down some views. New planting along the south boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15 Due to poor visibility into Cottam 2 South cumulative intervisibility cannot be achieved.
Wlgm/515/1							+	Already Scoped Out
Wlgm/538/1							+	Already Scoped Out  Already Scoped Out
Wlgm/59/1	+						+	Already Scoped Out
Wlgm/59/2	+	<del> </del>	<u> </u>		1	<del> </del>	+	Already Scoped Out
Wlgm/59/3							+	Already Scoped Out
Wlgm/59/4							+	Already Scoped Out
Wlgm/59/5	+		+		1	+	+	Already Scoped Out
Wlgm/59/6	+	<del> </del>	<u> </u>		1	<del> </del>	+	Already Scoped Out
. vv (C       / / / U	1		1	-	+	-	1	· · ·
		1			1	1	1	I Already Scoped Out
Wlgm/61/1 Wlgm/62/1								Already Scoped Out Already Scoped Out

Wlgm/63/1				Already Scoped Out
Wlgm/64/1				Already Scoped Out
Wlgm/64/2				Already Scoped Out
Wlgm/881/1				Already Scoped Out
Wlgm/976/1				Already Scoped Out
Wlgm/976/2				Already Scoped Out





# Public Rights of Way Receptor - Fill/86 (Fill/86/1)

### **Baseline Context:**

Public Bridleway: Located to the southwest of the settlement of Fillingham. This section of the bridleway heads from Willingham Road in the north to meet with bridleway (Ingh/24/1) which then continues in a diagonal alignment to meet with public footpath (Ingh/17/1) at the junction with public bridleway (Ingh/24/2) before heading south towards the settlement of Ingham.

Looking directly west over Cottam 1 North Site.

**Distance to Cottam Sites**: Fill/86/1: 415m to Cottam cable corridor and access

Fill/86/1: 0m to Cottam 1 North

Status: 2

Nearest Viewpoint/s: VP32, VP33 and LCC-C-F.

# **Description of Route:**

The first section of the route (as far as the first field boundary) heads from Willingham Road between two open arable fields where the wider surrounding fields are divided by ditches with few hedgerows. These fields are varying sizes and the tributaries of the River Till cut across them to form an irregular pattern. Many of the fields are elongated running in perpendicular alignment with Willingham Road. There is a small section of incidental scrub to the east side of the bridleway at this section. The second section of the route (as far as bridleway Ingh/24/1) continues across the arable fields which remain open with no hedgerows and only a scattering of small hedgerow trees.

There is little contrast between both sections of the route, which are open along the length with an absence of field hedgerows and tree cover giving open visibility west towards the Site/Sites.

The route is influenced by the open arable fields and the exposed nature of the location where the woodlands on the horizon form a significant component and add balance to the landscape. The location offers little intimacy due to the higher elevation of the landform, the lack of field hedgerows and the intensive arable land use. The horizon closes down visibility towards the north from the bridleway since the landform rises to a high point on Willingham Road at approximately 20m AOD. The overall experience along the route is interesting and pleasant, with some depth to views and strong contrasting features due to the presence of the plantation woodlands on the horizon, varied landform, and open arable fields. This is an isolated location with a distinct absence of settlement, built form or other man-made features.

Overall, the route is a quiet location, being subject to no passing traffic. The route offers an interesting transition through the landscape with clear open views all round, including views towards the local collection of small woodlands comprising Larch Plantation and New Plantation. The track offers a transition across an open landscape with clear open views. This is an ordinary route that takes account of the open arable landscape in close proximity to the receptor. Overall, this route offers a journey for riders and walkers with some features of interest.

**Sensitivity:** *High to Medium* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



SOLAR PROJECT			[Reference: ENU	10133/APP/C6.3.8.3.5.2.1_A] January 2023
Public Rights	of Way Receptor – Fill/86 (Fill/86/1)			
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change
	The first and second sections of the route would be significantly affected, as there are no hedgerows to each side giving rise to direct views over the construction works and views would be directly adjacent to the boundary of the Cottam 1 North Site. The works would be located on one side of the route (west) and although they would for a short section of the route, there would be oblique views from the field in the foreground towards the fields beyond. The changes to this section of the route would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would not be screened due to the absence of foreground hedgerows. During the latter part of the construction stage, views would become available of the elevated activities and there would be open views.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature along the entire section of the route. There would be a considerable change to the arable land use, but any field boundaries and any associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the north, south and east of this location.  Construction Access All throughout the construction stage the PROW	The foreground of the views from the route would change from the agricultural fields (to one side of the route) to an area of panels, but they would be set back from the route. The changes would be experienced in close proximity and within the context of the surrounding arable fields with a prevailing character of openness and distinct absence of other development or man-made features.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage, but the Scheme would introduce panels to the west side of the PRoW. For details on the planting mitigation for the operation magnitude of change (Year 15 ), please refer to Viewpoints VP32, VP33 and LCC-C-F.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
Magnitude	Medium	High	Medium	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor-Moderate <b>Not Significant</b>



<b>Public Rights</b>	of Way Receptor – Fill/86 (Fill/86/1)	[Reference: Livo 10133/AFF/C0.3.6.3.3.2.1_A] January 2023
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	<u>Sequential Frequent Visibility</u> The first and second sections of the route would be significantly affected, as there are no hedgerows to each side giving rise to direct views over the construction and operation works and views would be directly adjacent to the boundary of the Cottam 1 North Site.	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	During the construction stage (the works) and during the operation stage (the panel areas) would appear consistently and with short time lapses between instances. Although there is a slow speed of travel for walkers (riders may be travelling at speed), this is an open boundary and so the distances	There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area  Aesthetic Aspects of the Landscape
	between the areas of visibility would be frequent with no gaps between.  The foreground of the views from the route would change from the agricultural fields (to one side of the	Refer to Figure <b>8.15.2.1</b> [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and
	route) to reveal both the works during the construction stage and an area of panels during the operation stage, but they would be set back from the route. The changes would be experienced in close proximity and within the context of the surrounding arable fields with a prevailing character of	built form would also curtail cumulative visibility.  There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1
	openness and distinct absence of other development or man-made features.  The works and the panel areas are in close proximity to the receptor and are clearly visible together in	Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:
	views from selected viewpoints VP32, VP33 and LCC-C-F and LCC-C-G and also from areas between these viewpoints as the route takes a course from the settlement of Ingham in the south towards Willingham Road in the north.	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
	Sequential Occasional Visibility  The panel areas may appear with longer time lapses between appearances because the observer may be moving very slowly (riders may be travelling at speed) to appreciate the landscape and even though there are larger distances between the viewpoints along the route.	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of
		the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
	Construction: Low Operation (Year 1): Low	Construction: Low Operation (Year 1): Low
Magnitude	Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low	Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
Type of	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
Effect	Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term	Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
Significance	Construction: Minor <b>Not Significant</b> Operation (Year 1): Minor <b>Not Significant</b>	Construction: Minor <b>Not Significant</b> Operation (Year 1): Minor <b>Not Significant</b>
of Effect	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant



Public Rights of Way Receptor - Fill/767 (Fill/767/1)

### **Baseline Context:**

Public Bridleway: Located to the west of the settlement of Fillingham. This section of the bridleway heads north from Willingham Road where it takes a 'dog-leg' turn just to the southeast of North Farm. The public bridleway meets with other bridleways comprising Fill/85/1 which heads north and Fill/85/2 which heads south.

**Distance to Cottam Sites:** Fill/767/1: 274m to Cottam cable corridor and access

Fill/767/1: 16m to Cottam 1

Status: 2

Nearest Viewpoint/s: VP35, VP36 and LCC-C-H.

# **Description of Route:**

The first section of the route (as far as the first right-angled bend) heads from Willingham Road in a north south alignment between two arable fields defined by a strong hedgerow where the surrounding fields are in arable use and divided by similar hedgerows and ditches. These fields are mostly medium to large scale with a geometric pattern of varying shapes. A small tributary of the River Till breaks the regular pattern to the east with its meandering course. The hedgerow is located to the west side of the route and the bridleway is a crushed stone surfaced track. The second section of the route (as far as bridleway Fill/85/1) then continues east west across the arable fields which remain open, but there are hedgerows with a scattering of hedgerow trees.

There is little contrast between both sections of the route, which are open along their length with a field hedgerow providing the boundary to one side only. This field boundary has open parts where views are extended towards woodland plantations framing the horizon, such as Larch Plantation, which adds features of interest along the journey. There are distant views towards Glentworth and Fillingham (towards the northeast) in the context of the Scarps and Dipslope Character Area 6a.

The route is influenced by the open arable fields and the exposed nature of the location where the woodlands on the horizon form a significant component and add balance to the landscape in all directions. The location offers some intimacy due to the lower elevation of the landform, the presence of field hedgerows and the riparian vegetation along the tributaries of the River Till. The horizon closes down visibility towards the north from the bridleway since the landform rises to a high point on Kexby Road at approximately 25m to 30m AOD. The overall experience along the route is interesting and pleasant, with some depth to views and strong contrasting features due to the presence of the plantation woodlands on the horizon, slightly varied landform, and open arable fields.

Overall, the route is a quiet location, being subject to no passing traffic and set away from Willingham Road behind intervening hedgerows. The route offers an interesting transition through the landscape with clear open views all round, including views towards the local collection of small woodlands comprising Larch Plantation and New Plantation. The track offers a transition across an open landscape with clear open views towards Fillingham in the east, but curtailed visibility towards the west due to the intervening hedgerows. This is a pleasant route that takes account of the open arable landscape in close proximity to the receptor. This route offers a journey for riders and walkers with some features of interest that are typical in character to the wider open and arable land use where the tall and outgrown hedgerows add some intimacy along the route of the bridleways.

**Sensitivity:** *Medium to High* 

### **Embedded Mitigation:**

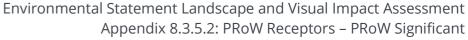
Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



# Public Rights of Way Receptor - Fill/767 (Fill/767/1)

Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change
The junction of the first and second sections of the route would only be significantly affected, where the bridleway takes a right-angled turn directly adjacent to the boundary of the Site/Sites. The works would be located on one side of the junction of the route (west) and although they would for a short section of the route, there would be direct views. The changes to this section of the route would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be screened by the foreground hedgerows. During the latter part of the construction stage, views would become available of the elevated activities and there would be views above the hedgerows.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.	The foreground of the views from the route would change from the agricultural fields (at the right-angled bend) to an area of panels, but they would be set back from the route. The changes would be experienced within the context of the surrounding arable fields with a prevailing character of openness and distinct absence of features and so would be more evident at this location.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage, but the Scheme would introduce panels to the west, east and south of the PRoW. For details on the planting mitigation for the operation magnitude of change (Year 15), please refer to Viewpoints VP35, VP36 and LCC-C-H.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
These short-lived construction activities would obstruct a narrow proportion of the view and be a dominant feature but only for a short section of the route where there is a change in direction. There would be a change to the arable land use, but any field boundaries and any associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the east of this location.			
Construction Access  All throughout the construction stage the PRoW will be affected due to Willingham Road having 3 points of access into the Site/Sites. The first point of access is close to Glebe Farm as it leads to field B2. The second point of access is close to North Farm as it leads to fields A2 and A4. The third point of access is close to Turpin's Bungalows as it provides access to fields C3 and C4.			
Cable Route Corridor PRoW receptor is outside of the 500m cable route corridor study area.			







	Substations PRoW receptor is outside of the 2km study areas for the substations.			
Magnitude	Medium	Medium	Medium	Low
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Adverse & Short Term
Significance of Effect	Moderate-Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor-Moderate <b>Not Significant</b>

# Public Rights of Way Receptor - Fill/767 (Fill/767/1)

# **In-Combination Effects [Cumulative Sites]**

#### Sequential Frequent Visibility

The junction of the first and second sections of the route would only be significantly affected, where the bridleway takes a right-angled turn directly adjacent to the boundary of the Site/Sites giving rise to direct views over the construction and operation works and views would be directly adjacent to the boundary of the Cottam 1 North Site.

During the construction stage (the works) and during the operation stage (the panel areas) would not appear consistently since this is only at a local point where the bridleway takes a right-angled turn and with no short time lapses between instances. Although there is a slow speed of travel (riders may be travelling at speed), this is an enclosed boundary and so the distances between the areas of visibility would be less frequent with some gaps between.

The foreground of the views from the route would change from the agricultural fields (to the corner turn of the route) to reveal both the works during the construction stage and an area of panels during the operation stage, but they would be set back from the route. The changes would be experienced in close proximity and within the context of the surrounding arable fields with a prevailing character of openness and distinct absence of other development or man-made features.

The works and the panel areas are in close proximity to the receptor and are clearly visible together in views from selected viewpoints VP34, VP35, VP36 and LCC-G-G and LCC-C-H and also from areas between these viewpoints as the route takes a course from the settlement of Ingham in the south towards Willingham Road in the north.

### Sequential Occasional Visibility

The panel areas may appear with shorter time lapses between appearances because although the observer may be moving very slowly (riders may be travelling at speed) to appreciate the landscape and even though there are larger distances between the viewpoints along the route, this is just a concentrated section of the route where it takes a right-angled turn. The panel areas may appear with longer time lapses between appearances because the observer may be moving very slowly (riders may be travelling at speed) to appreciate the landscape and even though there are larger distances between the viewpoints along the route.

# Cumulative Effects [Cumulative Developments]

#### Fabric of the Landscape

There would not be the removal of or changes in individual elements or features of the landscape within the character area.

There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area

# <u>Aesthetic Aspects of the Landscape</u>

Refer to Figure **8.15.2.1 [C6.4.8.15.2.1]** which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.

There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:

Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]
Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]

The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.

#### Overall Landscape Character and Visual Amenity

Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.



M	11/1/2
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	Construction: Medium to Low	Construction: Low					
	Operation (Year 1): Low	Operation (Year 1): Low					
Magnitude	Operation (Year 1): with only Embedded Mitigation: Low	Operation (Year 1): with only Embedded Mitigation: Low					
	Operation (Year 15): Low	Operation (Year 15): Low					
	Decommissioning: Low	Decommissioning: Low					
	Construction: Adverse & Short Term	Construction: Adverse & Short Term					
	Operation (Year 1): Adverse & Long Term	Operation (Year 1): Adverse & Long Term					
Type of Effect	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term					
	Operation (Year 15): Neutral & Long Term	Operation (Year 15): Neutral & Long Term					
	Decommissioning: Neutral & Short Term	Decommissioning: Neutral & Short Term					
	Construction: Minor <b>Not Significant</b>	Construction: Minor Not Significant					
Significance of	Operation (Year 1): Minor <b>Not Significant</b>	Operation (Year 1): Minor <b>Not Significant</b>					
	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant					
Effect	Operation (Year 15): Minor <b>Not Significant</b>	Operation (Year 15): Minor <b>Not Significant</b>					
	Decommissioning: Minor <b>Not Significant</b>	Decommissioning: Minor <b>Not Significant</b>					



[Reference: EN010133/APP/C6.3.8.3.5.2.3] January 2023

# Public Rights of Way Receptor - Pilh/20 (Pilh/20/1)

#### **Baseline Context:**

Public Footpath: Located to the northeast of the small settlement of Pilham. This section of the footpath heads from Station Road in an east west direction to meet with Bonsdale Lane just to the north of Bonsdale Farm.

**Distance to Cottam Sites**: Pilh/20/1: 930m to Cottam 3a

Pilh/20/1: 0m to Cottam 3b

Pilh/20/1: 192m to Cottam high voltage cable corridor and access

Status: 1

Nearest Viewpoint/s: VP56, VP57 and VP58.

# **Description of the Route:**

The first section of the route (as far as Glebe Farm) heads from Station Road in an east west direction between a mixture of grassland and arable fields. To the north of this section, there is no field boundary hedgerow bordering the public footpath and there is also an absence of hedgerow to Station Road. There is a broad rectangular arable field to the north of the footpath and to the south there is a series of small-scale grassland fields. The hedgerow to the south of this section of route is unmanaged and irregular with a good concentration of mature tree cover. The middle section of the route (as far as the right-angled turn) then continues east west across a similar series of arable and grassland fields. This section of the route is bordered to both sides by tall hedgerows with mature tree cover. There are also north south hedgerows with mature trees to the north of the route at this section. The final section of the route (as far as Bonsdale Lane) passes across a series of open arable fields that are larger in scale and divided by wide, low-cut hedgerows with very limited tree cover.

There is a notable contrast between all sections of the route with the first section being enclosed by the mature tree cover and tall hedgerows to the south, woodlands to the west and vegetation along the railway line to the north. The middle section of the route is enclosed on both sides by the tall hedgerows and tree cover and trees within the adjoining hedgerows also provide structure, enclosure, and intimacy to this location. The final section of the route is open and there are distant views towards the rising landform of the Scarps and Dipslope Character Area 6a at Blyborough, Grayingham and Willhoughton. These open views are influenced by the skyline that is disrupted by tree clumps, mast poles, railway gantry and vegetation bordering the mainline railway.

The route is influenced by the existing vegetation bordering the mainline railway that curtails visibility towards the north. The route offers some interesting features locally with a tight knit section first, which then opens out with more invigorating views towards the surrounding landscape, which is large scale and exposed. The overall experience is that of a very pleasant location with strong feelings of enclosure and intimacy.

Overall, the route is a quiet location, being subject to no passing traffic and set away from the main settlement of Pilham within a strong framework of small and medium scale field systems. The route offers an interesting transition through the landscape with open sections and sections of curtailed visibility. This is a pleasant route that takes account of the open arable landscape in close proximity to the receptor.

**Sensitivity:** *High* 

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Cottam
SOLAR PROJECT

Public Rights	of Way	Receptor	- Pilh/20	(Pilh/20/1

Public Rights	Public Rights of Way Receptor – Pilh/20 (Pilh/20/1)					
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change		
	The first section of the route would not be significantly affected since it is not directly adjacent to the boundary of the Site/Sites and views would be curtailed by the intervening hedgerow and tree cover. The central and final section of the route would be significantly affected due to the direct proximity to the boundary of the Cottam 3b Site. The works would be located on both sides (north and south) of the central section of the route (west) but this section supports strong hedgerows and tree cover and so views would be filtered. The works would also be located on one side (north) of the final section of the route extending across a collection of arable fields as far as the mainline railway. The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be screened by the foreground hedgerows and mature tree cover. During the latter part of the construction stage, views would become available of the elevated activities and there would be views above the hedgerows between the mature trees.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature for the full section of the route. There would be a change to the arable land use, but a	The foreground of the views from the route (along the middle and final sections) would change from the agricultural fields to an area of panels, but they would be set back from the route. The changes would be experienced within the context of the surrounding arable and pastoral fields with a prevailing character of enclosure to the west and then with openness towards the east with a distinct absence of features and wide views.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage. For details on the operation magnitude of change (Year 15), refer to Viewpoints VP56, VP57 and VP58.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.		
Magnitude	Medium	High	Medium	Low		
Type of Effect	Adverse & Short Term	Adverse & Long Term	Beneficial & Long Term	Neutral & Short Term		
Significance of Effect	Moderate-Major <b>Significant</b>	Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor <b>Not Significant</b>		



Public Rights of Way Receptor – Pilh/20 (Pilh/20/1)				
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	Sequential Frequent Visibility	Fabric of the Landscape		
	The first section of the route would not be significantly affected since it is not directly adjacent to the boundary of the Site/Sites and views would be curtailed by the intervening hedgerow and tree cover. The central and final section of the route would be significantly affected due to the direct proximity to the boundary of the Site/Sites. The works would be located on both sides	There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
	(north and south) of the central section of the route (west) but this section supports strong hedgerows and tree cover and so views would be filtered. The works would also be located on one side (north) of the final section of the route extending across a collection of arable fields as far as the mainline railway. The effects would give rise to direct views over the construction and	There would be the introduction of new elements and features comprising the solar panel areas and the substation area.		
	operation works and views would be directly adjacent to the boundary of the Cottam 3b Site.	Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites,		
	During the construction stage (the works) and during the operation stage (the panel areas) would not appear consistently along the central section of the route since this has bordering tree cover and hedgerows to filter the views, but there would be short time lapses between instances. Along the final section of the route, this is open with no intervening hedgerows and views would be experienced in close proximity and with clear visibility. There is a slow speed of travel, and this is an open boundary	cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these		
	and so the distances between the areas of visibility along the final section of the route would be more frequent than the central section with no gaps between.	Site/Sites.		
	The foreground of the views from the route would change from the agricultural fields (on both sides of the central section of the route and to the north side of the final section of the route) to reveal both the works during the construction stage and an area of panels during the operation stage, but they would be set back from the route. The changes would be experienced in	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:		
	close proximity and within the context of the surrounding arable fields with a prevailing character of openness and distinct absence of other development or man-made features other than farm buildings, the mainline railway and the distant settlement edge of Pilham to the southwest.	Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]		
	The works and the panel areas are in close proximity to the receptor and are clearly visible together in views from selected viewpoints VP56, VP57 and VP58 and also from areas between these viewpoints as the route takes a course from the settlement of Pilham in the west towards Bonsdale Lane in the east.	Overall Landscape Character and Visual Amenity  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an		
	Sequential Occasional Visibility  The panel areas may be evident with shorter time lapses between appearances because the observer may be moving very slowly to appreciate the landscape as the final section of the route has an open boundary with clear and direct views. Even though there are larger distances between the viewpoints along the route, this is a concentrated section of the route where there is an open section along this final section. The first and central sections of the route may experience sequential occasional visibility however due to the screening provided by vegetation to each side of the route.	arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.		
Magnitude	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Operation (Year 15): Low		
	Decommissioning: Low  Construction: Adverse & Short Term  Operation (Year 1): Adverse & Long Term	Decommissioning: Low  Construction: Adverse & Short Term  Operation (Year 1): Adverse & Long Term		
Type of Effect	Operation (Year 1): With only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term	Operation (Year 1): Note that the Company of the Co		
	Construction: Minor Not Significant	Construction: Minor Not Significant		
Significance of	Operation (Year 1): Minor <b>Not Significant</b>	Operation (Year 1): Minor <b>Not Significant</b>		
Effect	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant		
	Decommissioning, without Not Significant	Decommissioning, without the significant		



[Reference: EN010133/APP/C6.3.8.3.5.2.4\_A] January 2023

# Public Rights of Way Receptor - Stow/83 (Stow/83/1)

#### **Baseline Context:**

Public Footpath: Located to the east of the settlement of Stow and to the southwest of the settlements of Fillingham and Ingham.

**Distance to Cottam Sites**: Stow/83/1: 482m to Cottam cable corridor and access

Stow/83/1: 0m to Cottam 1 North

Stow/83/1: 678m to Cottam 1 permissive path

Status: 1

Nearest Viewpoint: VP18, VP21, VP22 and VP23.

# **Description of the Route:**

The first section of the route (as far as Presswood Cottages) extends from the small tributary of the River Till just to the north of Coates Gorse across a series of open arable fields. To the north of this section, the fields are geometric, but irregular and vary in size. These fields are bounded by straight hedgerows with limited tree cover. There is also a collection of woodlands to the north of this first section of the route. The middle section of the route (as far as The Bungalows) serves as access to various residential properties and farmsteads and is bordered by mature shelterbelts, woodlands, and narrow belts of trees. These woodlands and trees extend both north and south into the adjoining field systems adding intimacy and complexity to this section of the route (as far as Ingham Road) cuts diagonally across an open, arable field to meet with Ingham Road at the bridge crossing over the River Till.

There is a notable contrast between all sections of the route with the first section being open with views extending both north and south across the landscape. The central section of the route is intimate and enclosed by the mature tree cover and built form. The final section of the route is similar to the first section being open but with visibility curtailed towards the west where the winding tributary of the River Till and its associated riparian vegetation (along with the dense shelterbelt to the north).

The final section of the route is influenced by the presence of Squire's Bridge and the close proximity to Coates Hall and Hall Farm also have an influence on the route within its central section. The tall shelterbelt and the riparian vegetation along the River Till are also key features.

Overall, there a strong presence of woodland and tree cover that adds balance and interest to the route. The route is also influenced by the open arable fields within the first section. The overall experience is interesting and very pleasant, with some depth to views and strong contrasting features due to the presence of the plantation woodlands on the horizon and varied landform. This is also an isolated location with a distinct absence of settlement, built form or other man-made features.

**Sensitivity:** *High to Medium* 

# **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

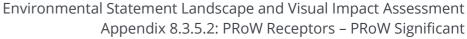
Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





# Public Rights of Way Receptor - Stow/83 (Stow/83/1)

	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change
	The first section of the route would be significantly affected since it is directly adjacent to the boundary of the Site/Sites, but views would be curtailed by the existing hedgerow to the north. The central and final section of the route would not be significantly affected due to the distance to the boundary of the Cottam 1 North Site/Sites. The works would be located on one side (north) of the first section of the route and this section supports a hedgerow and so views would be filtered and not direct. The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be screened by the fireground hedgerow. During the latter part of the construction stage, views would also become available of the elevated activities.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature but only for a short section in the wider context of the route. There would be a change to the arable land use, but any field boundaries and any associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the south and west of this location.  Construction Access  ProW will not be affected by construction traffic due to the di	The foreground of the views from the route (along the first section) would change from the agricultural fields to an area of panels, but they would be set back from the route. The changes would be experienced within the context of the surrounding expansive arable fields with a distinct absence of other features other than distant woodlands such that the presence of the panels would be more apparent.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage, but the Schem would introduce panels to both sides of the PRoW. For details on the planting mitigation for the operation magnitude of change (Year 15), please refer to Viewpoints VP18, VP21, VP22 and VP23.	
	Cable Route Corridor PRoW receptor is outside of the 500m cable route corridor study area.			
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[Reference: EN010133/APP/C6.3.8.3.5.2.4\_A] January 2023

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Significance of Effect	Moderate-Major <b>Significant</b>	Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor Not Significant
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term
Magnitude	Medium	High	Medium	Low
SOLAR PROJECT	PRoW receptor is partially within the 2km study area of the Cottam 1 North substation, particularly at section of PRoW where it passes underneath Coates and passes down towards Ingham Road.			

# Public Rights of Way Receptor - Stow/83 (Stow/83/1)

#### Sequential Frequent Visibility

The first section of the route would be significantly affected since it is directly adjacent to the boundary of the Site/Sites, but views would be curtailed by the intervening hedgerow and tree cover. The central and final section of the route would not be significantly affected due to the distance to the boundary of the Cottam 1 North Site. The works would be located on the north side of the first section of the route and this section supports a hedgerow and so views would be filtered. The effects would give rise to direct but filtered views over the construction and operation works and views would be directly adjacent to the boundary of the Cottam 1 North Site.

During the construction stage (the works) and during the operation stage (the panel areas) would not appear consistently along the first section of the route since this has bordering hedgerows to filter the views, and there would be short time lapses between instances. Along the final section of the route, this is open with no intervening hedgerows and views would be experienced in close proximity, but at an oblique angle and not directly adjacent to the boundary of the Site/Sites since the River Till provides separation. There is a slow speed of travel, and there is an open boundary and so the distances between the areas of visibility along the first section of the route would be more frequent than the central and final section with no gaps between.

The foreground of the views from the route would change from the agricultural fields (on the north side of the first section of the route and to the west side of the final section of the route) to reveal both the works during the construction stage and an area of panels during the operation stage, but they would be set back from the route. The changes would be experienced in close proximity and within the context of the surrounding arable fields with a prevailing character of openness and distinct absence of other development or man-made features other than farm buildings and the presence of Ingham Road (for the final section of the route).

The works and the panel areas are in close proximity to the receptor and are clearly visible together in views from selected viewpoints VP15, VP17, VP18, VP21, VP22 and VP23 and also from areas between these viewpoints as the route takes a course from the settlement of Ingham in the east, passing through the small settlement of Coates and heading towards Stow in the west.

#### Sequential Occasional Visibility

The panel areas may be evident with shorter time lapses between appearances because the observer may be moving very slowly to appreciate the landscape as the final section of the route has an open boundary with clear and direct views. Even though there are larger distances between the viewpoints along the route, this is a concentrated part of the route where there is clear visibility along this final section. The final section of the route may experience sequential occasional visibility due to the oblique views and the intervening separation provided by the course of the River Till.

# **Cumulative Effects [Cumulative Developments]**

#### Fabric of the Landscape

There would not be the removal of or changes in individual elements or features of the landscape within the character area.

There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area

### <u>Aesthetic Aspects of the Landscape</u>

Refer to Figure **8.15.2.1 [C6.4.8.15.2.1]** which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.

There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:

**Figure 8.15.2.6** Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV **[C6.4.8.15.2.6] Figure 8.15.2.8** Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV **[C6.4.8.15.2.8] Figure 8.15.2.9** Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV **[C6.3.4.15.2.9]** 

The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.

### Overall Landscape Character and Visual Amenity

Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.



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SOLAR PROJECT				
	Construction: Low	Construction: Low		
	Operation (Year 1): Low	Operation (Year 1): Low		
Magnitude	Operation (Year 1): with only Embedded Mitigation: Low	Operation (Year 1): with only Embedded Mitigation: Low		
	Operation (Year 15): Low	Operation (Year 15): Low		
	Decommissioning: Low	Decommissioning: Low		
	Construction: Adverse & Short Term	Construction: Adverse & Short Term		
	Operation (Year 1): Adverse & Long Term	Operation (Year 1): Adverse & Long Term		
Type of Effect	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term		
	Operation (Year 15): Neutral & Long Term	Operation (Year 15): Neutral & Long Term		
	Decommissioning: Neutral & Short Term	Decommissioning: Neutral & Short Term		
	Construction: Moderate-Major <b>Not Significant</b>	Construction: Minor Not Significant		
Significance of	Operation (Year 1): Major <b>Not Significant</b>	Operation (Year 1): Minor <b>Not Significant</b>		
o e	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant	Operation (Year 1): with only Embedded Mitigation: Minor Not Significant		
Effect	Operation (Year 15): Minor <b>Not Significant</b>	Operation (Year 15): Minor <b>Not Significant</b>		
	Decommissioning: Minor <b>Not Significant</b>	Decommissioning: Minor Not Significant		



# Public Rights of Way Receptor - TLFe/31/2

### **Receptor Baseline:**

Public Bridleway: Located to the west of Cammeringham, to the northeast of Sturton by Stow and the north of Thorpe le Fallows. This section of the bridleway follows a route north from Thorpe Lane before a taking a 'rightangled' turn towards the west at Lower Furze Hill.

**Distance to Cottam Sites:** 

TLFe/31/2: 767m to Cottam cable corridor and access

TLFe/31/2: 0m to Cottam 1 South

Status: 2

**Nearest Viewpoint:** VP5, VP11 and VP12.

# **Description of the Route:**

The first section of the route (as far as The Grange) extends from Thorpe Lane just to the west of the residential property known as The Lodge. The route extends across a series of open arable fields. To the north of this section there is Thorpe Wood, which us a significant feature in the context of the bridleway. To the west of this section of the route the fields are elongated and rectangular and the east the fields are geometric, but irregular and vary in size. These fields are bounded by a good framework of hedgerows but with limited tree cover. The second section of the route (as far as the junction with public bridleway Camm/31/1) follows a similar series of arable fields and is bordered by Thorpe Wood to the east. Thorpe Wood forms forms part of other woodlands that extent to the east of this location towards Battleby creating a well-structured landscape and adding intimacy and complexity to this section of the route.

There is a notable contrast between both sections of the route with the first section being open with views extending east across the landscape, but views towards the west are curtailed by the tall hedgerow. The second section of the route is intimate and more enclosed due to the presence of Thorpe Wood.

The route is influenced by the presence of the woodland blocks and the tree cover associated with Thorpe le Fallows. This location offers some intimacy and feeling of comfort due to the enclosure provided by the tall hedgerow that adjoins the bridleway to the west.

Overall, the route is also influenced by the open arable fields and the woodlands on the horizon that form a significant component and add balance to the landscape. The location offers some intimacy despite the close proximity to the residential property (The Lodge) to the south. There is a gap between the woodland on the horizon that extends the view towards the distant ridge line where the Scampton Airfield is just visible. The overall experience is interesting and very pleasant, with some depth to views and strong contrasting features.

**Sensitivity:** *High to Medium* 

# **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





Public Rights of Way Receptor - TLFe/31/2					
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change	
	The first section of the route would be significantly affected since it is directly adjacent to the boundary of the Site/Sites and views would not be curtailed by any intervening hedgerow and tree cover. The second section of the route would not be significantly and would only have oblique views towards the boundary of the Cottam 1 South Site. The works would be located on two sides (east and west) of the first section of the route and this section supports no hedgerows and tree cover to the east and so views would be open and direct at this side. The changes would include the construction activities during site preparation / enabling works, construction, and commissioning with effects such as construction traffic, noise and vibration from construction activities, dust generation, site runoff, mud on roads, and the visual intrusion of plant and machinery on site. At the early stages of the construction stage, ground, and lower-level activities such as the construction of the solar panel areas and associated infrastructure and inverters would be openly visible looking east but towards the west the hedgerow would provide screening. During the latter part of the construction stage, views would also become available of the elevated activities.  Other works would be undertaken in connection with the construction including fencing, gates, boundary treatment and other means of enclosure and works for the provision of security and monitoring measures such as CCTV and the laying down of internal tracks. There would also be landscape and biodiversity mitigation works, including planting and the improvement of the foreground hedgerows.  These short-lived construction activities would obstruct a wide proportion of the view and be a dominant feature but only for half of a section in the wider context of the route. There would be a change to the arable land use, but any field boundaries and any associated tree cover would remain intact. There would not be a fundamental change to the surroundings to the north of this location	The foreground of the views from the route (along the first section) would change from the agricultural field to an area of panels, but they would be set back from the route and seen in the context of the dark backdrop of Thorpe Wood. The changes would be experienced within the context of the surrounding arable fields with a distinct presence of woodlands such that the presence of the panels would be less apparent.	Secondary mitigation such as planting, and grass seeding would be taken into account at this stage, but the Scheme would introduce panels to both sides of the PRoW. For details on the planting mitigation for the operation magnitude of change (Year 15), please refer to Viewpoints VP5, VP11 and VP12.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.	
Magnitude	Medium	High	Medium	Low	
Type of Effect	Adverse & Short Term	Adverse & Long Term	Adverse & Long Term	Neutral & Short Term	
Significance of Effect	Moderate-Major <b>Significant</b>	Major <b>Significant</b>	Moderate-Major <b>Significant</b>	Minor <b>Not Significant</b>	



# Public Rights of Way Recentor - TI Fe/31/2

Public Rights of Way Receptor - TLFe/31/2			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	Sequential Frequent Visibility	Fabric of the Landscape	
	The first section of the route would be significantly affected since it is directly adjacent to the boundary	There would not be the removal of or changes in individual elements or features of the landscape within the	
	of the Site/Sites and views would not be curtailed by any intervening hedgerow and tree cover. The	character area.	
	second section of the route would not be significantly and would only have oblique views towards the		
	boundary of the Cottam 1 South Site. The works would be located on both sides (east and west) of the	There would be the introduction of new elements and features comprising the solar panel areas and the	
	first section of the route and this section supports hedgerows only to the west boundary and so views would not be filtered towards the east. The effects would give rise to direct views over the construction	substation area within the character area	
	and operation works and views would be directly adjacent to the boundary of the Cottam 1 South Site.	Aesthetic Aspects of the Landscape	
	and operation works and views would be directly adjacent to the boundary of the cottain 1 south site.	Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the	
	During the construction stage (the works) and during the operation stage (the panel areas) would	cumulative developments would not be experienced across the majority of the 5km study area. This is due to the	
	appear consistently along the first section of the route to the east side since this has no bordering tree	distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening	
	cover and hedgerows to filter the views, and there would be short time lapses between instances.	settlements and built form would also curtail cumulative visibility.	
	Along the second section of the route, this is relatively more open with few intervening hedgerows, but	Section ents and balle form would also carrain carrialative visibility.	
	views would not be experienced in close proximity or directly adjacent to the boundary of the Site/Sites	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton	
	since the intervening field parcels and individual fields provide separation. There is a slow speed of	1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is	
	travel for walkers (but riders may be travelling at speed), and there is an open boundary and so the	set out in further detail within the following figures:	
	distances between the areas of visibility along the first section of the route would be more frequent	See out in further detail within the following figures.	
	than the second section where the panel areas afford separation by intervening field parcels and	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6]	
	individual fields.	Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]	
	The foreground of the views from the route would change from the agricultural fields (on the east side	Tigate 6. 15.2.5 Cottain 1, 2, 3d and 35 West Barton Camalative Bevelopments Augmented 21V [co.5.4.15.2.5]	
	of the first section of the route) to reveal both the works during the construction stage and an area of	The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type	
	panels during the operation stage, but they would be set back from the route. The changes would be	or area different from another. The strategic major road network is defined by important historic routes and in	
	experienced in close proximity and within the context of the surrounding arable fields with a prevailing	contrast, the east west minor road network links several historic and distinctive smaller string of settlements	
	character of openness and distinct absence of other development or man-made features other than	across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and	
	farm buildings and occasional residential dwellings.	hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.	
	The works and the panel areas are in close proximity to the receptor and are clearly visible together in	landscape and reducing the visionity deross the dream	
	views from selected viewpoints vp5, vp11 and vp12 and also from areas between these viewpoints as the	Overall Landscape Character and Visual Amenity	
	route takes a course from Thorpe Lane in the south, passing The Grange and heading towards Furze	Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of	
	Hill in the north.	historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These	
	Sequential Occasional Visibility	relevant characteristics of the landscape and land use have some ability to accommodate change without undue	
	The panel areas may be evident with shorter time lapses between appearances because the observer	adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the	
	may be moving very slowly (riders may be travelling at speed) to appreciate the landscape as the first	landscape and its communications and infrastructure features. Moreover, these features are often set within a	
	section of the route has an open boundary with clear and direct views towards the east. Even though	well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative	
	there are larger distances between the viewpoints along the route, this first section is a concentrated	effects.	
	part of the route where there is open visibility. The second section of the route may experience	enects.	
	sequential occasional visibility due to the oblique views and the intervening separation provided by the		
	intervening field parcels and individual fields.		
	Construction: Low	Construction: Low	
Magnitudo	Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low	Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low	
Magnitude			
	Operation (Year 15): Low	Operation (Year 15): Low	
	Decommissioning: Low  Construction: Adverse & Short Torm	Decommissioning: Low Construction: Adverse & Short Torm	
	Construction: Adverse & Short Term	Construction: Adverse & Short Term	
Tumo of Effect	Operation (Year 1): Adverse & Long Term	Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long	
Type of Effect	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term	Term	
	Operation (Year 15): Neutral & Long Term	Operation (Year 15): Neutral & Long Term	
	Decommissioning: Neutral & Short Term	Decommissioning: Neutral & Short Term	



Environmental Statement Landscape and Visual Impact Assessment Appendix 8.3.5.2: PRoW Receptors – PRoW Significant

[Reference: EN010133/APP/C6.3.8.3.5.2.5\_A] January 2023

Significance of Effect

Construction: Minor **Not Significant**Operation (Year 1): Minor **Not Significant** 

Operation (Year 1): with only Embedded Mitigation: Minor Not Significant

Operation (Year 15): Minor **Not Significant** Decommissioning: Minor **Not Significant** 

Construction: Minor Not Significant

Operation (Year 1): Minor **Not Significant** Operation (Year 1): with only Embedded Mitigation: Minor **Not** 

Significant

Operation (Year 15): Minor **Not Significant** Decommissioning: Minor **Not Significant** 



# Public Rights of Way Receptor - Camm/31 (Camm/31/1)

# **Receptor Baseline:**

Public Bridleway: Located to the west of Cammeringham and to the northeast of Sturton by Stow. The bridleway follows a route north from Thorpe Lane before a taking a 'right-angled' turn at Lower Furze Hill and then a further turn to meet with Furze Hill at the junction with Ingham Road. The bridleway has a partly enclosed aspect along the route due to the bordering hedgerows, which have grown tall in parts. The woodland blocks and vegetation lining the River Till also help to close down visibility across the landscape in views from the bridleway.

**Distance to Cottam Sites:** Camm/31/1: 679m to Cottam cable corridor and access

Camm/31/1: 217m to Cottam 1

Status: 2

Nearest Viewpoint: VP11 / VP12 / VP16

<u>VP11 – TLFe/31/2:</u> The view is located on PRoW, bridleway (TLFe/31/2) looking towards the southern extent of the Cottam 1 Site/Sites. The view is ordinary and typical to the local character. The openness of the bridleway makes the environment unsettling. The overall environment is bland and unpleasant.

<u>VP12 – Camm/31/1:</u> The view is located along PRoW, bridleway Camm/31/1, looking southwest towards the southern extent of the Cottam 1 Site/Sites The view is ordinary and typical to local character and the experience is pleasant with a sense of safety and security.

<u>VP16 – Bridleway Camm/31/1 and Ingham Road, Furze Hill</u>: The view is located at the junction with PRoW, bridleway Camm/31/1 and Ingham Road Furze Hill, looking south towards the Cottam South 1 Site and north towards the Cottam I North Site. The viewpoint is influenced by the presence of the long straight alignment of Ingham Road. The River Till is just to the west of this viewpoint, where it passes beneath Squire's Bridge as a local bridge crossing and notable feature that breaks the monotony of Ingham Road. The watercourse is distinguished by the presence of its tree cover in what is an otherwise open landscape with a strong presence of woodland in the distance. The riparian woodland that follows the meandering course of the River Till is the distinctive feature as well as the wide grass verges on Ingham Road. The intensive levels of management within this arable farmland add decline to the natural qualities of the view, but the overall impression is that of a simple, calm, and muted landscape with some interesting features.

### **Description of Route:**

The first section of the route travels south from Ingham Road to the west of Furze Hill. The route continues south towards Lower Fruze Hill where it then curves east and follows the lining of a ditch and once again turns south to towards The Grange with Thorpe Wood to its right-hand side.

There is little contrast between both sections of the route. The first section of the route has more built form in view and due to the presence of Ingham Road, the first section of the route can be busy and frequently used. The second section of the route is more tranquil and away from built form. Thorpe wood to the east of this section of the route adds to the tranquil nature of the location.

The route is influenced by the open arable fields and the exposed nature of the location where the woodlands form distinctive shapes in the horizon. The route is influenced by the built form associated with local farms and the presence of ditches and tributaries in the landscape.

Overall, the route is a quiet location, being subject to no passing traffic in the second section but some in the first. The route offers an interesting transition through the landscape with clear open views all round, including views towards the local collection of small woodlands comprising Larch Plantation and New Plantation. The track offers a transition across an open landscape with clear open views. This is an ordinary route that takes account of the open arable landscape in close proximity to the receptor. Overall, this route offers a journey for riders and walkers with some features of interest.

# **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Public Rights	of Way Receptor – Camm/31 (Camm/3	31/1)		
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change
	The route is approximately 227m from the boundary of the Cottam 1 North Site and therefore would perceive any construction effects at this distance.  Construction Access All throughout the construction stage the PRoW will be affected due to Ingham Road having a point of access into the Cottam 1 North Site. The access route is through a local track near Low Farm as it connects to fields C26 and C25.  Cable Route Corridors PRoW receptor is outside of the 500m cable route corridor study area.  Substation/s PRoW receptor is outside of the 2km study areas for the substations at Cottam 1 North.	The route is approximately 227m from the boundary of the site, not in close proximity to any Cable Route Corridor and substation but in close proximity to proposed construction access and would therefore perceive construction effects at this distance.	Primary Mitigation: Panels set back from boundary of Cottam 1 South Site.  Secondary Mitigation: New planting bordering the east and west boundaries to each side of the bridleway of the Cottam 1 South Site.  Notes: Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Open visibility towards the Cottam 1 South Site due to the flat, low-lying landform and the absence of intervening hedgerows and woodland cover along parts of the route, particularly the southern section of the route. New planting along the east and west boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

Public Rights of Way Receptor - Camm/31 (Camm/31/1)	
In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
No Intervisibility	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	There would be the introduction of new elements and features comprising the solar panel areas and the substation area.
	Aesthetic Aspects of the Landscape Refer to Figure 8.15.1.3 [C6.4.8.15.1.3] which shows that with the Cottam 3a and 3b Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility between these Site/Sites.
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 3a Site and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:
	Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]
	Overall Landscape Character and Visual Amenity



		Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 3b Site would not alter the overall character of the landscape within the Unwooded Vales Character Area 4a.
		Construction: Low
		Operation (Year 1): Low
Magnitude	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Low
		Operation (Year 15): Low
		Decommissioning: Low
		Construction: Adverse & Short Term
Type of		Operation (Year 1): Adverse & Long Term
Effect	Not Applicable	Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term
LIICCC		Operation (Year 15): Neutral & Long Term
		Decommissioning: Neutral & Short Term
		Construction: Minor Not Significant
Significance	Not Applicable	Operation (Year 1): Minor Not Significant
of Effect		Operation (Year 1): with only Embedded Mitigation: Minor Not Significant
OI LIICCC		Operation (Year 15): Minor Not Significant
		Decommissioning: Minor Not Significant



# Public Rights of Way Receptor - Corr 22 (Corr/22/1) (Corr/22/2) (Corr/22/3)

# **Receptor Baseline:**

Public Footpath: Located to the north of the settlement of Corringham. The footpath follows a route north from Church Lane, passing the properties of Old Hall and Hall Farm before reaching Pilham Lane. The bridleway is enclosed to the southern section due to the woodland cover around Old Hall and Hall Farm. The northern section of the route is more open, but views towards the Site/Sites are curtailed by intervening hedgerows and the vegetation bordering Corringham Beck.

**Distance to Cottam Sites**: Corr/22/1: 491m to Cottam 2

Corr/22/1: 137m to Cottam high voltage cable corridor and access

Corr/22/2: 658m to Cottam 2 Corr/22/3: 675m to Cottam 2

Status: 1

**Nearest Viewpoint:** VP53

<u>VP53 – Corr/22/1:</u> The view is located on the PRoW, footpath (Corr/22/1) at the junction with PilhamLane, looking southeast towards the northern extent of the Cottam 2 Site. The view is also looking north towards the southern extent of the Cottam 3b Site.

The footpath is a feature as it heads south from Aisby, but the wider outlook is disrupted by hedgerows and woodland blocks in places. Where there are distant views towards the skyline, they are often punctured by telegraph poles which appear dominant and consistent on the horizon. There is limited tree cover around Aisby and therefore the residential properties stand out in the landscape. The overall experience is a calm and intact landscape, but the presence of poles and other man-made features exert an ordinary influence over the other more attractive features.

# **Description of Route:**

The first section of the route stems south from a route south of Aisby. The route travels south towards the west of Hall Farm. From here the route stems southwest and joins onto Church Lane where it joins onto Corringham.

There is little contrast between both sections of the route. The first section of the route offers for a more tranquil environment as the flat open landscape is enhanced by the low-cut hedgerows and the lack of trees in the landscape. The second section of the route is more densely packed, and views are closed down by built form associated with the settlement of Corringham.

The route is influenced by the built form of Corringham to the south and Aisby to the north. The route connects both settlements together without the busyness of the local route that travels alongside Corringham Beck to the east of Hall Farm.

Overall, the first section of the route is quiet and offers extensive views across the flat arable landscape with built form associated with Corringham closing down views to the south. The second section of the route is busy, and the view is closed down by the dense built form associated with Corringham. The tranquil nature of the route is lost in this section of the route.

## **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Public Rights	s of Way Receptor – Corr 22 (Corr/22/1)	(Corr/22/2) (Corr/22/3)		
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change
	The route is approximately 500m from the Cottam 2 site boundary and therefore would perceive construction effects at this distance.  Construction Access The PRoWs will not be affected by construction traffic due to the distance between the PRoWs and the proposed construction access.  Cable Route Corridors PRoW is partially within the 500m cable route corridor study area.  Substation/s PRoW receptor is within the 2km study area of the Cottam 2 Substation.	The route is approximately 500m from the Cottam 2 site boundary, not in close proximity to proposed construction access and in close proximity to Cable Route Corridors and substation and would therefore perceive construction effects at this distance.	Primary Mitigation: Panels set back from the northwest boundaries of Cottam 2 Site  Secondary Mitigation: New planting bordering the northwest boundaries (which share a boundary with Corringham Beck) of the Cottam 2 Site.  Notes: Some potential visibility towards High Voltage Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards the Cottam 2 Site. The hedgerow bordering the south side of Pilham Lane and the intervening field hedgerows to the south of the lane are likely to close down visibility. The riparian vegetation bordering Corringham Beck, and the flat, low-lying landform is also likely to curtail views. New planting along the northwest boundaries of the Cottam 2 Site will curtail visibility in Year 1 and close down visibility in Year 15.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

Public Rights	lic Rights of Way Receptor - Corr 22 (Corr/22/1) (Corr/22/2) (Corr/22/3)		
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	No Intervisibility	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area.	
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.2 [C6.4.8.15.2.2]</b> which shows that with the Cottam 2 Site, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cottam 2 and Tillbridge Solar. This cumulative visibility is set out in further detail within the following figures:	
		Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]	



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		Overall Landscape Character of the Unwooded Vales  Overall, the character of the Unwooded Vales is shaped by the strong agricultural presence, with wide areas retaining a strong sense of rural tranquility. In contrast, the low levels of woodland cover create a relatively open and expansive landscape comprising an arable land use within a scattered pattern of settlement, linked by a series of minor roads east to west and a more strategic road network north to south. These relevant characteristics of the landscape have some ability to accommodate change without undue adverse effects. The minor patches of cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape within the Unwooded Vales Character Area.
Magnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant



# Public Rights of Way Receptor - Fill/85 (Fill/85/1) (Fill/85/2)

# **Receptor Baseline:**

Public Bridleway: Located to the west of the settlement of Glentworth. The bridleway heads south from Kexby Road at Glentworth Grange to meet with bridleways (Fill/767/1 and Fill/85/2). The bridleway is mostly open along its length, since there is an absence of field hedgerows, woodland, and tree cover.

**Distance to Cottam Sites:** Fill/85/1: 365m to Cottam cable corridor and access

Fill/85/1: 231m to Cottam 1

Fill/85/2: 16m to Cottam cable corridor and access

Fill/85/2: 0m to Cottam 1

Status: 2

Nearest Viewpoint: Fill/85/1 Cable corridor and access: VP35 / VP41

Fill/85/1 Cottam 1: VP35 / VP41

Fill/85/2 Cable corridor and access: LCC-C-G Fill/85/2 Cottam 1: VP34 / VP35 / LCC-CG

<u>VP34 – Fill/85/2:</u> The view is located along the route of PRoW bridleway (Fill/85/2), looking in all directions towards the Cottam 1 North Site and south towards the Cottam 1 South Site. The view is also looking northwest towards the Cottam 2 Site.

The view is typical in character to the wider open and arable land use where the tall and outgrown hedgerows add some intimacy along the route of the bridleway. There is a sense of security and a safe quality to the landscape. Overall, the experience is bland but pleasant.

<u>VP35 – Junction of Fill/85/1, Fill/85/2, and Fill/767/1</u>: The view is located on public right of way (PRoW), bridleway (Fill/85/1, Fill/85/2 and Fill/6/1) looking 'all-round' over the Cottam North 1 Site and southwest towards the Cottam 1 South Site beyond.

The view is typical in character to the wider open and arable land use where the tall and outgrown hedgerows add some intimacy along the route of the bridleways. This intimacy is then contrasted with open parts where there are gaps in the hedgerows and views are extended towards woodland plantations framing the horizon, such as Larch Plantation. There are distant views towards Glentworth towards the northeast forming part of the Scarps and Dipslope Character Area 6a. There is a sense of security and a safe quality to the landscape. Overall, the experience is pleasant as the slightly rolling landform adds to the character and increases the scale. There is an overall bland context to the views due to the intensive arable land use, but the sense of isolation and tranquility is an appealing feature.

<u>VP41 – Gltw/85/1 just off Kexby Road</u>: The view is located on the PRoW, bridleway (Gltw/85/1) at the junction with Kexby Road, looking south towards the Cottam 1 North Site with Cottam 1 South Site beyond. The bridleway is a prominent feature in the landscape as it heads south from Kexby Road with clear, far-reaching views. The lack of foreground hedgerow opens visibility and there are also very few intervening hedgerows that increases the sense of scale. The immediate view is typical of the local landscape character and the far-reaching open views are consistent with the wider landform characteristics of the area. The overall experience is pleasant but with some bland foreground features.

LCC-C-G – ProW Fill/85/2: This viewpoint is located on PRoW, bridleway (Fill/85/2) at the junction with Willingham Road, looking in all directions over the Cottam 1 North Site and southwest towards the Cottam 1 South Site beyond.

The view is influenced by the open nature of the location with strong hedgerows that lack tree cover where the woodland blocks are prominent features in the landscape. The overall experience is pleasant as this is a quiet location with a distinct absence of settlement and disturbance.

### **Description of Route:**

The first section of the route travels south from PRoW Gltw/85/1 and continues south the end of PRoW Fill/85/1. At this point the route travels southeast and then abruptly turns south again and continues past Glebe Farm to Willingham Road.

There is little contrast between both sections, the first section of the route is more tranquil, the route comes into contact with small tributaries and ditches that cut through agricultural fields. The vegetation associated with the tributaries offer some disruption in an otherwise flat landscape. The second section of the route is tranquil but as the route joins onto Willingham Road the tranquil nature subsides.

The route is influenced by the open arable fields and the exposed nature of the location where the woodlands on the horizon form a significant component and add balance to the landscape.

Overall, the route is a quiet location, being subject to no passing traffic until the last section of the route as it connects to Willingham Road.



# **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change
	The route is approximately 270m from the Cottam 1 North site boundary and would perceive construction effects at this stage.  Construction Access All throughout the construction stage the PRoW will be affected due to Willingham Road having 3 points of access into the Site/Sites. The first point of access is close to Glebe Farm as it leads to field B2. The second point of access is close to North Farm as it leads to fields A2 and A4. The third point of access is close to Turnpins Bungalows as it provides access to fields C3 and C4.  Cable Route Corridors  PRoW receptor is outside of the 500m cable route corridor study area.  Substation/s  PRoW receptor is outside of the 2km study area of the Cottam 1 North substation.	The route is approximately 270m from the Cottam 1 North site boundary, it is not in close proximity to Cable Route Corridors and substation however it is in close proximity to proposed construction access and therefore would perceive construction effects at this distance.	Primary Mitigation: Panels set back from the east and west boundaries of the Cottam 1 North Site.  Secondary Mitigation: New planting bordering the east and west boundaries to each side of the bridleway of the Cottam 1 South Site.  Notes: Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards the Cottam 1 North Site. There are few hedgerows and woodland cover, and hedgerows are also absent leaving open views from the bridleway to each side. New planting along the northwest boundaries of the Cottam 2 Site/Sites will curtail visibility in Year 1 and close down visibility in Year 15.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>



Public Rights of Way Receptor - Fill/85 (Fill/85/1) (Fill/85/2)			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	No Intervisibility	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]	
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.	
		Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.	
Magnitude	Not Applicable	Construction: Low Operation (Year 1): Low Operation (Year 1): with only Embedded Mitigation: Low Operation (Year 15): Low Decommissioning: Low	
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Neutral & Long Term Decommissioning: Neutral & Short Term	
Significance of Effect	Not Applicable	Construction: Minor Not Significant Operation (Year 1): Minor Not Significant Operation (Year 1): with only Embedded Mitigation: Minor Not Significant Operation (Year 15): Minor Not Significant Decommissioning: Minor Not Significant	



# Public Rights of Way Receptor - Gltw/85 (Gltw/85/1)

# **Receptor Baseline:**

Public Bridleway: Located to the west of the settlement of Glentworth. The bridleway heads south from Kexby Road at Glentworth Grange to meet with bridleways (Fill/85/1, Fill/767/1 and Fill/85/2). The bridleway is mostly open along its length since there are no field hedgerows to the boundary of the bridleway.

**Distance to Cottam Sites:** Gltw/85/1: 819m to Cottam cable corridor and access

Gltw/85/1: 264m to Cottam cable 1

Status: 2

Nearest Viewpoint: VP35 / VP41

<u>VP35 – Junction of Fill/85/1, Fill/85/2 and Fill/767/1:</u> The view is located on public right of way (PRoW), bridleway (Fill/85/1, Fill/85/2 and Fill/6/1) looking 'all-round' over the Cottam North 1 Site and southwest towards the Cottam 1 South Site beyond. The view is typical in character to the wider open and arable land use where the tall and outgrown hedgerows add some intimacy along the route of the bridleways. This intimacy is then contrasted with open parts where there are gaps in the hedgerows and views are extended towards woodland plantations framing the horizon, such as Larch Plantation. There are distant views towards Glentworth towards the northeast forming part of the Scarps and Dipslope Character Area 6a. There is a sense of security and a safe quality to the landscape. Overall, the experience is pleasant as the slightly rolling landform adds to the character and increases the scale. There is an overall bland context to the views due to the intensive arable land use, but the sense of isolation and tranquility is an appealing feature.

<u>VP41 – Gltw/85/1 just off Kexby Road:</u> The view is located on the PRoW, bridleway (Gltw/85/1) at the junction with Kexby Road, looking south towards the Cottam 1 North Site with Cottam 1 South Site beyond. The bridleway is a prominent feature in the landscape as it heads south from Kexby Road with clear, far-reaching views. The lack of foreground hedgerow opens visibility and there are also very few intervening hedgerows that increases the sense of scale. The immediate view is typical of the local landscape character and the far-reaching open views are consistent with the wider landform characteristics of the area. The overall experience is pleasant but with some bland foreground features.

# **Description of Route:**

The first section of the route begins just south of Glentworth Grange at Kexby Road. The route travels in a north south direction. The second section of the route joins onto PRoW Fill/85/1 as it heads further south onto Willingham Road.

There is little contrast between the first and the second section of the route. The first section of the route experiences more noise and fast-moving distractions due to the proximity to Kexby Road. The second section of the route is more tranquil and less affected by the built form associated with Glentworth.

The route is influenced by the open arable fields and the exposed nature of the location where woodlands to the west such as Ash Holt, Larch Plantation, Big Wood and Fillingham Low Wood closes down views to the west and offers stimulation in an otherwise flat and tranquil environment.

Overall, the route is a quiet location, being subject to few passing traffic from Kexby Road. The route offers an interesting transition through the landscape with clear open views all round, including views towards the local collection of small woodlands comprising Larch Plantation and Ash Holt. The track offers a transition across an open landscape with clear open views towards Glentworth in the northeast and limited views to the west due to the intervening woodlands.

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Public Rights	s of Way Receptor – Gltw/85 (Gltw/85/1	)		
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change
	The route is approximately 275m from the boundary of the Site and would perceive any construction effects at this distance.  Construction Access PRoW will not be affected by construction traffic due to the distance between the PRoW and the proposed construction access.  Cable Route Corridors PRoW Receptor is outside of the 500m cable route corridor study area.  Substation/s PRoW receptor is outside of the 2km study areas for the substations at Cottam 1 North Site.	The route is approximately 275m from the boundary of the Site, not in close proximity to any construction access, Cable Route Corridor and substation and would therefore would perceive any construction effects at this distance.	Primary Mitigation: Panels set back from boundary of Cottam 1 North Site.  Secondary Mitigation: New planting bordering the boundary of the Cottam 1 North Site.  Notes: Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards the Cottam 1 North Site. There are few hedgerows and woodland cover, and hedgerows are also absent leaving open views from the bridleway to each side. New planting along the east and west boundaries of the Site/Sites will curtail visibility in Year 1 and close down visibility in Year 15.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

blic Rights of Way Receptor - Gltw/85 (Gltw/85/1)		
In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
No Intervisibility	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
	There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
	Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]	



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		Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects
Magnitude	Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant



# Public Rights of Way Receptor - Ingh/24 (Ingh/24/1) (Ingh/24/2)

## **Receptor Baseline:**

Public Bridleway: Located to the northwest of the settlement of Ingham. The bridleway heads diagonally from its connection with bridleway (Fill/86/1) towards Ingham before taking a turn south along Shorth Lane to meet with West End. The section of the bridleway that follows Short Lane is enclosed with tall hedgerows and good tree cover. Where the bridleway cuts diagonally across the field this follows a local watercourse, and this section is open with a lack of hedgerows and tree cover.

**Distance to Cottam Sites**: Ingh/24/1: 859m to Cottam cable corridor and access

Ingh/24/1: 1m to Cottam 1 Ingh/24/2: 875m to Cottam 1

Status: 2

Nearest Viewpoint: VP26 / LCC-C-F

<u>VP26 – Ingh/24/2:</u> The view is located on PRoW, bridleway (Ingh/24/2), looking northwest towards Cottam 1 North Site and southwest towards the Cottam 1 South Site. The view is typical in character to the wider rolling arable landscape, which is interesting and pleasant where hedgerows and woodland add interest and lend an enclosed nature to views across the area. In terms of variety, there are several elements that create an interesting composition and there are also strong contrasts between open arable fields and enclosed woodlands in parts. The good combination of features adds colour, texture and harmony to views. Overall, the view is balanced, and the landscape is well-managed with strong colours that give an overall impression of an attractive and pleasant landscape.

<u>LCC-C-F – ProW Ingh/24/1:</u> This viewpoint is located on PRoW, bridleway (Ingh/24/1) looking west over the Cottam 1 North Site and southwest over the Cottam 1 South Site. The view is typical in character to the wider rolling arable landscape, which is interesting and pleasant where hedgerows and woodland add interest. The enclosed nature is only attributed to woodland cover as there are few other features to break up the landscape. There are strong contrasts in parts where wide-open views are possible that provide a greater sense of scale and these contrast with areas of intimacy that often occur close to the edges of settlements. The Bridleway is well used and the proximity to the land drain gives the route a distinctive 'sense of place'. The overall experience within this viewpoint is interesting and pleasant.

#### **Description of Route:**

The first section of the route begins at the southern end of PRoW Fill/86/1. The route as the section travels in southeast direction as it cuts through the arable fields in a meandering setting. The second section of the route continues on from Ingh/24/1 and abruptly turns south to join onto the northwestern edge of the settlement of Ingham.

There is little contrast between both sections of the route, the first section of the route travels in a meandering setting whereas the second section of the route is a straight line.

The route is influenced by the open arable fields and the exposed nature of the landscape in the first section of the route and the built form associated with Ingham at the second section of the route. The route overall has contrasting tranquil and disrupted settings on either end of the route.

Overall, the first section of the route is in a guiet and tranquil position due to the vast arable fields in all directions. The second section of the route becomes more disrupted as it joins onto Ingham.

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



[Reference: EN010133/APP/C6.3.8.3.5.3.5] January 2023

Public Rights	Public Rights of Way Receptor - Ingh/24 (Ingh/24/1) (Ingh/24/2)				
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change	
	The route is 10m from the Cottam 1 North site boundary and would perceive any construction effects at this distance.	The route is approximately 10m from the Cottam 1 North site boundary, it is not in close proximity to any construction access, Cable Route Corridor and Substation and would therefore perceive construction	Primary Mitigation: Panels set back from east boundary of the Cottam 1 North Site.  Secondary Mitigation: Planting bordering the east	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and	
	Construction Access PRoW will not be affected by construction traffic due to the distance between the PRoW and the proposed construction access.	effects.	boundary of the Cottam 1 North Sites.  Notes: Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some	secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.	
	Cable Route Corridors PRoW is outside of the 500m cable route corridor study area.		visibility towards the Cottam 1 North Site. There are few hedgerows and woodland cover, and hedgerows are also absent leaving open views from the bridleway towards the west. New planting along the east boundaries of the		
	Substation/s PRoW receptor is outside of the 2km study areas for the substations.		Site/Sites will curtail views in Year 1 and close down visibility in Year 15.		
Magnitude	Very Low	Very Low	Low	Very Low	
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term	
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>	

In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	There would be the introduction of new elements and features comprising the solar panel areas and the substation within the character area
	Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements built form would also curtail cumulative visibility.
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set further detail within the following figures:
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8]



		Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
Magnitude	Not Applicable	Construction: Very Low Operation (Year 1): Wery Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant



Public Rights of Way Receptor - Ingh/26 (Ingh/26/2) (Ingh/26/3)

### **Receptor Baseline:**

Public Footpath: Located to the west of the settlement of Ingham. The footpath heads west along Long Lane, passing Low Farm where it makes a 'dog-leg' turn and then progresses as far as the minor tributary of the River Till where it meets with footpath (Stow/83/1). The western section of the footpath passes parallel to an existing hedgerow (with isolated trees) along its north side. The eastern section also follows the existing hedgerow on its north side but becomes enclosed by a small woodland block close to the junction with Long Lane. The footpath is located just to the north of Coates Gorse, which forms a group with other small woodlands and provides screening to the south.

**Distance to Cottam Sites**: Ingh/26/2: 545m to Cottam 1

Ingh/26/3: 644m to Cottam cable corridor and access

Ingh/26/3: 1m to Cottam 1

Status: 1

**Nearest Viewpoint:** Ingh/26/2 Cottam 1: VP26

Ingh/26/3 Cottam 1 and cable corridor and access: VP18 / VP21

<u>VP26 – Ingh/24/2:</u> The view is located on PRoW, bridleway (Ingh/24/2), looking northwest towards Cottam 1 North Site and southwest towards the Cottam 1 South Site. The view is typical in character to the wider rolling arable landscape, which is interesting and pleasant where hedgerows and woodland add interest and lend an enclosed nature to views across the area. In terms of variety, there are several elements that create an interesting composition and there are also strong contrasts between open arable fields and enclosed woodlands in parts. The good combination of features adds colour, texture and harmony to views. Overall, the view is balanced, and the landscape is well-managed with strong colours that give an overall impression of an attractive and pleasant landscape.

<u>VP18 – St Edith's Church and Coates Hall</u>: The view is located at St Edith's Church and Coates Hall, looking south towards the Cottam 1 South Site and north towards Cottam North Site.

The viewpoint is influenced by the presence of the listed buildings at St Edith's Church and Coates Hall. The River Till that passes beneath Squire's Bridge but is hardly evident in the landscape due to lack of tree cover in this open landscape. There is however a strong presence of woodland in the distance that adds balance and interest to the view. The intensive levels of management within this arable farmland add decline to the natural qualities of the view, but the overall impression is that of a simple, calm, and attractive landscape with pleasant views.

<u>VP21 – Stow/83/1</u>: The view is located on the PRoW, footpath (Stow/83/1), looking directly north over the Cottam 1 North Site and directly south over the Cottam 1 North Site with the Cottam 1 South Site beyond. The view is influenced by the open arable fields and the woodlands on the horizon that form a significant component and add balance to the landscape. The location offers some intimacy despite the open nature to the north due to the lower elevation of the view, the bordering hedgerow to the south and the small woodland thicket (to the east) just to the northwest of Low Farm on Long Lane. The horizon closes down the view since the landform rises to a high point on Willingham Road at approximately 20m AOD. The overall experience is interesting and very pleasant, with some depth to views and strong contrasting features due to the plantation woodlands on the horizon and varied landform. This is also an isolated location with a distinct absence of settlement, built form or other man-made features.

# **Description of Route:**

The first section of the route beings on the western edge of Ingham and travels west towards the top of Low Farm. From here the route staggers to the north before resuming its west direction. The final section of the route passes through a local watercourse and passes through arable fields before joining onto PRoW Stow/83/1.

There is little contrast between the first section of the route when compared to the rest of the route is influenced by the settlement of Ingham to the east and Low Farm to the west. The views in this section of the route are broken up by built form. The second and third section of the route is influenced by the open arable landscape.

The route is influenced by the open arable fields and the exposed nature of the location where woodlands can be seen in the far distance providing stimuli to the view. The second section of the view is influenced by the open nature of the view combined with the woodlands in the horizon such as Coates Gorse and New Plantation closing down views.

Overall, the route is a quiet location, being subject to no passing traffic and set away from Ingham.

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.



Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

Public Rights	Public Rights of Way Receptor – Ingh/26 (Ingh/26/2) (Ingh/26/3)				
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change	
	The route is approximately 0m from the boundary of the Cottam 1 North site and would perceive construction effects at this distance.  Construction Access PRoW will not be affected by construction traffic due to the distance between the PRoW and the proposed construction access.  Cable Route Corridors PRoW is outside of the 500m cable route corridor study area.  Substation/s PRoW is outside of the 2km study area of Cottam 1 North substation.	The route is approximately 0m from the boundary of the Cottam 1 North site, it is not in close proximity to proposed construction access, Cable Route Corridor and substations and would therefore perceive construction effects at this distance.	Primary Mitigation: Panels set back from southeast boundary of Cottam 1 North Site.  Secondary Mitigation: Planting bordering the southeast boundary of the Cottam 1 North Site.  Notes: Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Very minor visibility towards Cottam 1 North Site. There is an open boundary to the western most section of the footpath where it meets with footpath (Stow/83/1) leaving partially open views towards the west (there is an intervening north south boundary hedgerow between the Site/Sites and this location, which closes down some visibility). New planting along the southeast boundary of the Cottam 1 North Site at this location will curtail views in Year 1 and help close down visibility in Year 15.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.	
Magnitude	Very Low	Very Low	Low	Very Low	
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term	
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>	



Public Rights of Way Receptor - Ingh/26 (Ingh/26/2) (Ingh/26/3)

	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
	No Intensicibility	Tabric of the Landscane
	No Intervisibility	<u>Fabric of the Landscape</u> There would not be the removal of or changes in individual elements or features of the landscape within the character area.
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
Magnitude	Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant



# Public Rights of Way Receptor - Ingh/27 (Ingh/27/3) (Ingh/27/4) (Ingh/27/5)

## **Receptor Baseline:**

Public Footpath: Located to the southwest of the settlement of Ingham. The footpath heads west from the junction with footpath (Ingh/27/2) passing the sewage works and then taking a short 'dog-leg' turn just to the southeast of Low Farm. The footpath then takes a 'right-angled' turn south to meet with Stow Lane. The eastern section of the footpath is bordered by a strong hedgerow network with mature trees as far as the sewage works. The middle section of the footpath is more open with a low hedgerow and no hedgerow trees. The western section of the footpath is then bordered by tree cover (for a short section to the west of the sewage works) and then takes an open route (with very low-cut hedgerows and no trees) before joining Stow Lane.

**Distance to Cottam Sites**: Ingh/27/3: 809m to Cottam 1

Ingh/27/4: 894m to Cottam cable corridor and access

Ingh/27/4: 624m to Cottam 1

Ingh/27/5: 420m to Cottam cable corridor and access

Ingh/27/5: 105m to Cottam 1

Status: 1

**Nearest Viewpoint:** Ingh/27/3 Cottam 1: VP18 / VP21

Ingh/27/4 Cottam 1 and cable corridor and access: LCC-C-E Ingh/27/5 Cottam 1 and cable corridor and access: VP22 / VP23

<u>VP18 – St Edith's Church and Coates Hall</u>: The view is located at St Edith's Church and Coates Hall, looking south towards the Cottam 1 South Site and north towards Cottam North Site.

The viewpoint is influenced by the presence of the listed buildings at St Edith's Church and Coates Hall. The River Till that passes beneath Squire's Bridge but is hardly evident in the landscape due to lack of tree cover in this open landscape. There is however a strong presence of woodland in the distance that adds balance and interest to the view. The intensive levels of management within this arable farmland add decline to the natural qualities of the view, but the overall impression is that of a simple, calm, and attractive landscape with pleasant views.

<u>VP21 – Stow/83/1</u>: The view is located on the PRoW, footpath (Stow/83/1), looking directly north over the Cottam 1 North Site and directly south over the Cottam 1 North Site with the Cottam 1 South Site beyond. The view is influenced by the open arable fields and the woodlands on the horizon that form a significant component and add balance to the landscape. The location offers some intimacy despite the open nature to the north due to the lower elevation of the view, the bordering hedgerow to the south and the small woodland thicket (to the east) just to the northwest of Low Farm on Long Lane. The horizon closes down the view since the landform rises to a high point on Willingham Road at approximately 20m AOD. The overall experience is interesting and very pleasant, with some depth to views and strong contrasting features due to the plantation woodlands on the horizon and varied landform. This is also an isolated location with a distinct absence of settlement, built form or other man-made features.

<u>VP22 – Ingh/27/5:</u> The view is located on PRoW, footpath (Ingh/27/5) looking northwest towards the Cottam 1 North Site and southwest towards the Cottam 1 South Site.

The overall experience is interesting and very pleasant, with some depth to views and strong contrasting features due to the presence of a varied horizon. The plantation woodlands and riparian vegetation are also distinctive features. This is an isolated location with a distinct absence of settlement, built form or other man-made features. The overall experience of the view is interesting and pleasant.

<u>VP23 – Ingh/27/5 and Ingham Road</u>: The view is located at the junction with PRoW Bridleway Ingh/27/5 and Ingham Road looking directly south over the Cottam 1 South Site and north towards the Cottam 1 North Site. The view is influenced by the open arable fields and the woodlands on the horizon that form a significant component and add balance to the landscape. The location offers some intimacy despite the open nature to the north due to the bordering hedgerows to each side of Ingham Road and the small woodland thicket (to the east) associated with the tributary of the River Till. The horizon closes down the view since the landform rises to a high point on Long Lane at approximately 20m AOD rising to 30m AOD at the edge of the settlement of Ingham. The overall experience is interesting and very pleasant, with some depth to views and strong contrasting features, and due to the presence of the plantation woodlands on the horizon and varied landform. Overall, Ingham Road is a strong feature in the view as it connects the settlements of Ingham in the east to Stow in the west, however the grass verges are a distinctive feature.

LCC-C-E – ProW Ingh/27/2: This viewpoint is located on PRoW, footpath (Ingh/27/2) at the junction with Stow Road, looking west towards both the Cottam 1 North and Cottam 1 South Site.

The view is typical in character to the string of settlements that follow the scarp slope where the experience is pleasant, and where the open arable landscape is a dominant feature with distant views towards the west. The vast, exposed landscape is the main feature of this view and hedgerows and hedgerow trees close to the road helps break down the vast arable fields in places. The overall experience is interesting, pleasant, and invigorating.

#### **Description of Route:**

The first section of the route beings on the southwestern edge of the settlement of Ingham. From here the first section of the route travels south down to Stow Lane. The second section of the route begins at the halfway point of the first section. The second section of the route travels in a western direction past the sewage works and ends just southwest of Low Farm. From here the third section of the route turns south and meets Stow Lane.



[Reference: EN010133/APP/C6.3.8.3.5.3.7] January 2023

There is little contrast between the first section of the route when compared to the rest of the route. The first section of the route is influenced by the settlement of Ingham to the northeast and Low Farm to the west. The views in this section of the route are broken up by built form. The second and third section of the route is influenced by the open arable landscape and the points in which it makes contact with Stow Lane.

The route is influenced by the open arable fields and the exposed nature of the location where woodlands can be seen in the far distance providing stimuli to the view. The second section of the view is influenced by the open nature of the view combined with the woodlands in the horizon such as Coates Gorse and New Plantation closing down views.

Overall, the route is a quiet location, being subject to moving traffic in the points where it meets Ingham and Stow Lane. The sections which pass through arable fields remain tranquil.

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.

Public Rights	of Way Receptor - Ingh/27 (Ingh/27/3	) (Ingh/27/4) (Ingh/27/5)		
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change
	The route is approximately 400m from the Cottam 1 North boundary and would perceive construction effects at this distance.  Construction Access PRoW will not be affected by construction traffic due to the distance between the PRoW and the proposed construction access.  Cable Route Corridors PRoW receptor is outside of the 500m cable route corridor study area.  Substation/s PRoW receptor is outside of the 2km study area of the Cottam 1 North substation.	The route is approximately 400m from the Cottam 1 North boundary, it is not in close proximity to any construction access, Cable Route Corridor and substation and would therefore perceive construction effects at this distance.	Primary Mitigation: Panels set back from northeast boundary of Cottam 1 South Site.  Secondary Mitigation: Planting bordering the northeast boundary of the Cottam 1 South Site.  Notes: Some potential visibility towards Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards Cottam 1 South Site. The footpath has a more open section at its western end where it takes a 'right-angled' turn to meet with Stow Lane, leaving open views towards the south (there is an intervening hedgerow to each side of Stow Lane between the Site/Sites and this location, which closes down some visibility). New planting along the northeast boundaries of the Cottam 1 South Site will curtail views in Year 1 and help close down visibility in Year 15.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>



	hts of Way Receptor - Ingh/27 (Ingh/27/3) (Ingh/27/4) (Ingh/27/5)			
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]		
	No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.		
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area		
		Aesthetic Aspects of the Landscape  Refer to Figure <b>8.15.2.1</b> [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.		
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:		
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.		
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.		
Magnitude	Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low		
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term		
Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant		



## Public Rights of Way Receptor - Stur/72 (Stur/72/1) (Stur/72/2) (Stur/72/3)

## **Receptor Baseline:**

Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from Fleets Road in a northerly direction where it then meets with footpath (Stur72/2) then passing Sturton by Stow Primary School it joins with footpath (Stow/72/1) at the parish boundary. The southern section of the footpath is enclosed by built development as far as the primary school when the footpath then follows an open section with views towards the east.

**Distance to Cottam Sites**: Stur/72/1: 986m to Cottam 1

Stur/72/2: 976m to Cottam 1

Stur/72/3: 867m to Abnormal loads access

Stur/72/3: 864m to Cottam 1

Stur/72/3: 636m to Cottam permissive path

Status: 1

**Nearest Viewpoint:** VP9

<u>VP9 – Fleets Road, Stur/79/1:</u> The view is located on Fleets Road at the junction with PRoW, footpath (Stur/79/1), looking northeast towards the southwest boundary of the Cottam 1 Site/Sites.

The view is typical to local character and with the residential development being within the context of the view this adds a sense of security, safety, and familiarity at this location. This is a relatively calm edge of the settlement; the dominance of Fleets Road is however distracting in what otherwise is a pleasant view. The hedgerows and tree cover provide a strong feature.

# **Description of Route:**

The first section of the route begins on the eastern edge of the settlement of Stow. From here the route travels south and borders the eastern edge of stow and leads to the second section of the route which runs along the eastern edge of the settlement Sturton by Stow until finally it branches off into PRoW Stur/73/1

There is little to no contrast between the first and second section of the route. The first section of the route has Ingham Road acting as a strong presence. Due to the close distance to Stow this section of the route would experience noise distractions from the vhicles travelling on Ingham Road. The second section of the route is more tranquil, but it would still experience noise distractions due to the close proximity to Sturton by Stow.

The route is influenced by the settlements of Stow and Sturton by Stow which closes down views to the west.

Overall, the route is a busy location, being subject to passing traffic at Ingham Road and the settlements of Stow and Sturton by Stow.

## **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



<b>Public Rights</b>	Public Rights of Way Receptor – Stur/72 (Stur/72/1) (Stur/72/2) (Stur/72/3)				
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change	
	The route is approximately 1km from the Cottam 1 North site boundary and would not perceive any construction effects at this distance.  Construction Access PRoW will not be affected by construction traffic due to the distance between the PRoW and the proposed construction access.  Cable Route Corridors PRoW receptor is outside of the 500m cable route corridor study area.  Substation/s PRoW receptor is outside of the 2km study area of the Cottam 1 North substation.	The route is approximately 1km from the boundary of the Cottam 1 North site, it is not in close proximity to construction access, Cable Route Corridors and substations and would therefore not perceive any construction effects at this distance.	Primary Mitigation: Panels set back from southwest boundaries of Cottam 1 South Site.  Secondary Mitigation: New planting bordering the southwest boundaries of the Cottam 1 South Site.  Notes: No visibility towards Abnormal Loads Access due to the intervening settlement of Sturton by Stow. Some visibility towards Cottam 1 South Site/Sites, but the distance and intervening hedgerow cover curtails some views. New planting along the southwest boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.	
Magnitude	Very Low	Very Low	Low	Very Low	
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term	
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>	

Public Rights of Way Receptor – Stur/7	ic Rights of Way Receptor – Stur/72 (Stur/72/1) (Stur/72/2) (Stur/72/3)		
In-Combination Effects	[Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
No Intervisibility		Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
		Aesthetic Aspects of the Landscape Refer to Figure 8.15.2.1 [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
		Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]	



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		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
Magnitude	Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant



Public Rights of Way Receptor - Stur/73 (Stur/73/1)

### **Receptor Baseline:**

Public Footpath: Located to the northeast of the settlement of Sturton by Stow. The footpath heads from the 'T' junction with footpath (Stur72/3) then passing in and almost east west direction it joins with Fleet's Lane. The footpath crosses a large-scale, open arable landscape with no dividing hedgerows or tree cover, giving open visibility towards the east and southeast.

**Distance to Cottam Sites:** Stur/73/1: 294m to Cottam cable corridor and access

Stur/73/1: 17m to Cottam 1

Stur/73/1: 646m to Cottam 1 permissive path

Status: 1

Nearest Viewpoint: VP10 / LCC-C-C

VP10 – Stur/73/1: The view is located on PROW, footpath (Stur/3/1) looking northeast with the Cottam 1 South Site in the immediate foreground.

The view is influenced by the intensive arable landscape where the presence of hedgerows helps reduce the scale. This is a quiet location (even though it is in close proximity to Sturton by Stow) with a distinct absence of settlement or busy roads. The local road network passes across the landscape with some right-angled bends giving the opportunity to capture views towards the distant ridgeline. The viewpoint depicts a large-scale landscape that is divided by a strong hedgerow network at this location, which helps to decrease the sense of scale. This is a quiet spot and Fleets Lane is an attractive local lane with distinctive grass verges but is open in parts due to the lack of verge side hedgerows. The overall experience is a pleasant and invigorating comprising a view from a quiet location in close proximity to the settlement of Sturton by Stow.

LCC-C-C - Stur/73/1: This viewpoint is situated on PRoW, footpath (Stur/73/1) looking east towards the Cottam 1 South Site and northeast towards the Cottam 1 North Site.

The view is influenced by the intensive arable landscape where the presence of hedgerows helps reduce the scale. This is a quiet location (even though it is in close proximity to Sturton by Stow). The local road network passes across the landscape with some right-angled bends in the foreground context of the distant ridgeline. The viewpoint depicts a large-scale landscape that is divided by a strong hedgerow network, which helps to decrease the sense of scale. This is a quiet spot, and the overall experience is a pleasant and invigorating given the close proximity to the settlement of Sturton by Stow. The overall experience within this viewpoint is interesting and very pleasant due to the presence of the vast expanse of landscape.

## **Description of Route:**

The first section of the route begins at the southern point of the PRoW Stur/72/3 and travels in a northeast direction till it joins onto Fleets Lane to the east.

There is little contrast between the first section of the route when compared to the rest of the route. The first section of the route is influenced by the settlement of Sturton by Stow to the west. The views in this section of the route are broken up by built form. The second and third section of the route is influenced by the open arable landscape.

The route is influenced by the open arable fields and the exposed nature of the location where woodlands can be seen in the far distance providing stimuli to the view. The second section of the view is influenced by the open nature of the view combined with the woodlands in the horizon associated with the River Till just past Fleets Lane.

Overall, the route is a quiet location, being subject to no passing traffic till it reaches Fleets Lane and is set away from Sturton by Stow.

### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



Public Rights	Public Rights of Way Receptor - Stur/73 (Stur/73/1)				
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change	
	The route is approximately 20m from the boundary of the Cottam 1 North Site and would perceive any construction effects at this distance.  Construction Access All throughout the construction stage the PRoW will be affected due to Fleets Lane having a point of access into fields E1 and E4.  Cable Route Corridors PRoW is outside of the 500m cable route corridor study area.  Substation/s PRoW receptor is outside of the 2km study area for Cottam 1 North Site substation	The route is approximately 20m from the boundary of the Cottam 1 North Site and is not in close proximity to the Cable Route Corridors or the substations however it is in close proximity to construction access and therefore would perceive construction effects at this distance.	Primary Mitigation: Panels set back from southeast boundaries of Cottam 1 South Site.  Secondary Mitigation: New planting bordering the southwest boundaries of the Cottam 1 South Site.  Notes: No visibility towards Cable Corridor and Access due to the intervening settlement of Sturton by Stow. The meandering hedgerow to the east of the sewage works also supports tree cover, which helps close down views in this direction. Some visibility towards Cottam 1 South Site, but the distance and intervening hedgerow cover curtails some views. New planting along the southwest boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.	
Magnitude	Very Low	Very Low	Low	Very Low	
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term	
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>	

Public Rig	Public Rights of Way Receptor – Stur/73 (Stur/73/1)		
	In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
	No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
		There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
		Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
		There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
		Figure 8.15.2.6 Cottam 1, 2, 3a and Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]	



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		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects
Magnitude	Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant



[Reference: EN010133/APP/C6.3.8.3.5.3.10] January 2023

# Public Rights of Way Receptor - Stur/80 (Stur/80/1)

## **Receptor Baseline:**

Public Footpath: Located to the east of the settlement of Sturton by Stow. The footpath heads from Fleet's Road passing across an open arable field to meet with Thorpe Lane. This is a very short section of footpath with open views towards the north and northeast.

**Distance to Cottam Sites:** Stur/80/1: 824m to Cottam cable corridor and access

Stur/80/1: 0m to Cottam 1

Status: 1

Nearest Viewpoint: VP8

<u>VP8 – Stur/80/1:</u> The view is located on PRoW footpath (Stur/80/) looking northeast with the southwestern extent of the Cottam 1 South Site in the foreground and with Cottam 2 North beyond.

The view is influenced by the presence of the River Till that passes beneath the Thorpe Lane at a local bridge. The watercourse is distinguished by the presence of rusty pastures and localized concentrations of riparian tree cover that soften the skyline in what is an otherwise open and featureless landscape. There are intensive levels of management within this arable landscape that add some decline to the natural qualities of the view, but interesting features remain adding to the overall character. The overall impression are views over a simple calm landscape at a local vantage point on the public footpath network just off Thorpe Lane.

### **Description of Route:**

The route connects Fleets Road with Thorpe Lane in an east west direction. The route is small and cuts across a small section of an arable field to form the connection between the two roads.

The route is influenced by Fleets Road and Thorpe Lane. The PRoW acts as a simple connection route between the two roads. The route is influenced by the open and flat nature of the landscape with it being only interrupted by the roads and the woodlands associated with the River Till to the east.

Overall, the route is a quiet location, being subject to passing traffic of Fleets Road and Thorpe Lane.

## **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.





Public Rights of Way Receptor - Stur/80 (Stur/80/1)

Public Rights of Way Receptor – Stur/80 (Stur/80/1)				
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change
	The route is approximately 340m from the Cottam 1 South boundary and would perceive any construction effects at this distance.  Construction Access PRoW will not be affected by construction traffic due to the distance between the PRoW and the proposed construction access.  Cable Route Corridors PRoW receptor is outside of the 500m cable route corridor study area.  Substation/s PRoW receptor is outside of the 2km study area for Cottam 1 North Site substation	The route is approximately 340m from the Cottam 1 South boundary, it is not in close proximity to proposed construction access, Cable Route Corridor and substation and therefore would perceive construction effects at this distance.	Primary Mitigation: Panels set back from southwest boundaries of Cottam 1 South Site.  Secondary Mitigation: New planting bordering the southwest boundaries of the Cottam 1 South Site.  Notes: Open visibility towards the Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Some visibility towards Cottam 1 South Site, but the distance and intervening hedgerow cover closes down some views. New planting along the southeast boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

Public Rights of Way Receptor - Stur/80 (Stur/80/1)		
In-Combination Effects [Cumulative Sit	es] Cumulative Effects [Cumulative Developments]	
No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character	
	area.	
	There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
	Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1</b> [C6.4.8.15.2.1] which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]	



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		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
Magnitude	Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant



[Reference: EN010133/APP/C6.3.8.3.5.3.11] January 2023

## Public Rights of Way Receptor - TLFe/32 (TLFe/32/1)

## **Receptor Baseline:**

Public Footpath: Located to the east of the settlement of Sturton by Stow. The footpath heads from Thorpe Lane at Thorpe Bridge and then continues further south in a meandering alignment (following the eastern bank of the River Till) to meet with footpath (Scmp/32/1), which runs for a short section before joining with Tillbridge Road (just to the northwest of Tillbridge Farm). The south side of Thorpe Lane supports a dense belt of trees (running for a length of approximatly 350m), which helps close down visibility when looking north and northeast from the footpath at its northern section.

**Distance to Cottam Sites**: TLFe/32/1: 680m to Cottam cable corridor and access

TLFe/32/1: 10m to Cottam 1

Status: 1

Nearest Viewpoint: VP7

VP7 – Thorpe Bridge TLFe/32/1: The view is located on Thorpe Lane at Thorpe Bridge at the junction with footpath (TLFe/32/1) where the lane crosses the River Till, looking northeast towards the southern extent of the Cottam 1 Site/Sites.

The viewpoint is influenced by the presence of the River Till that passes beneath Thorpe Bridge at this local stopping point off the lane. The watercourse is distinguished by the presence of rusty pastures and minor concentrations of riparian tree cover on the distant skyline in what is an otherwise open and featureless landscape. There are intensive levels of management within this arable farmland that add some decline to the natural qualities of the view. The overall impression are distinctive views over a simple calm landscape at a local stopping point on Thorpe Lane.

## **Description of Route:**

The first section of the route beings on Thorpe Lane east of Thorpe Bridge. The route follows the meandering River Till as it travels along its eastern edge in a south direction. The second section of the route ends just north of Tillbridge Farm.

There is little contrast between the first section of the route when compared to the rest of the route. The first section of the route has Thorpe Lane acting as a major detractor in the otherwise tranquil landscape.

The route is influenced by the River Till and its setting. The meandering nature of the river influences the route and adds to the tranquility of the landscape. The view is limited to the west due to the River, however the views to the east are vast and open.

Overall, the route is a quiet location, being subject to the limited passing traffic on Thorpe Lane and is set away from Sturton by Stow.



Public Rights	ublic Rights of Way Receptor - TLFe/32 (TLFe/32/1)			
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change
	The route is approximately 0m from the Cottam 1 South boundary and therefore would perceive construction effects at this distance.  Construction Access All throughout the construction stage the PRoW will be affected due to Thorpe Lane having a point of access into the Cottam 1 South Site through field D10.  Cable Route Corridors PRoW receptor is outside of the 500m cable route corridor study area.  Substation/s PRoW receptor is outside of the 2km study area of Cottam 1 North Site substation	The route is approximately 0m from the Cottam 1 South boundary, it is not in close proximity to Cable Route Corridor and substation however it is in close proximity to proposed construction access and therefore would perceive construction effects at this distance.	Primary Mitigation: Panels set back from south boundaries of Cottam 1 South Site.  Secondary Mitigation: New planting on the south boundaries of the Cottam 1 South Site.  Notes: Partly open visibility towards the Cable Corridor and Access, but due to the temporary nature of the construction works the effects would be limited. Partly open visibility towards Cottam 1 South Site, but the distance and intervening tree cover to the south side of Thorpe Lane closes down some views. New planting along the south boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]
No Intervisibility	Fabric of the Landscape  There would not be the removal of or changes in individual elements or features of the landscape within the character area.
	There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area
	Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:
	Figure 8.15.2.6 Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV [C6.4.8.15.2.6] Figure 8.15.2.8 Cottam 1, 2, 3a and Tillbridge Solar Cumulative Developments Augmented ZTV [C6.4.8.15.2.8] Figure 8.15.2.9 Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV [C6.3.4.15.2.9]



		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
Magnitude	Not Applicable	Construction: Very Low Operation (Year 1): Very Low Operation (Year 1): with only Embedded Mitigation: Very Low Operation (Year 15): Very Low Decommissioning: Very Low
Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant



Public Rights of Way Receptor - Wlgm/538 (Wlgm/538/1)

### **Receptor Baseline:**

Public Footpath: Located at the eastern edge of the settlement of Willingham by Stow. The footpath heads from Fillingham Lane passing the sewage works and Grange Farm in a 'slight diagonal alignment' to meet with Cot Garth Lane in the south. The northern section of the footpath is partly enclosed due to the presence of the sewage works and associated tree cover. The small, rectangular area of woodland to the west of Stone Pit Lane also provides screening and enclosure in views towards the east. The southern section of the footpath is open to the east (no bordering hedgerows), but the intervening hedgerows bordering Cot Garth Lane close down visibility towards the Site/Sites.

**Distance to Cottam Sites**: Wlgm/538/1: 15m to Abnormal loads access

Wlgm/538/1: 292m to Cottam cable corridor and access

Status: 1

Nearest Viewpoint: n/a

### **Description of Route:**

The first section of the route begins at Fillingham Lane and the route travels in a southeast direction to join onto Cot Garth Lane. The route is short and is mainly used for easy connection between the two Lanes.

There is little to no contrast between the first section of the route when compared to the rest of the route. Both sections of the route is influenced by the settlement of Willingham by Stow and its surrounding settlements and local lanes.

The route is influenced by Fillingham Lane and Cot Garth Lane. The route acts as a easy connection link between both Lanes and has limited views due to intervening hedgerows.

Overall, the route is a quiet location, being subject to passing traffic at Fillingham Lane and Cot Garth Lane.

#### **Embedded Mitigation:**

Embedded Mitigation would be taken into account at the construction, operation (Year 1 and Year 15) and decommissioning stages of the Scheme. This Embedded Mitigation is also referred to as primary mitigation and would include; panels to be set a minimum of 15m from adjacent PRoW, panels to be set a minimum of 50m from adjacent residential property boundaries, panels to be set minimum of 20m from major watercourses and minimum of 8m from minor watercourses and panels to be set a minimum of 3m from Site boundaries. Existing hedges are also to be allowed to grow out and will be managed to a height of 5m. Hedgerow trees will be encouraged to grow out to add further thickening and growth to the field boundaries with the addition of new hedgerow trees as appropriate, randomly spaced along the length of existing hedges.

Lighting will be limited to downlights within substations and battery banks only and used when maintenance or security is required. Lighting will be PIR operated and will be calibrated to vehicle and personnel movements. All visible lighting would be 50W, installed at a maximum height of 4m with cowls fitted to prevent light spillage. Lighting required within panelled areas will be manually operated. There will be no lighting on perimeter fencing.



[Reference: EN010133/APP/C6.3.8.3.5.3.12] January 2023

Public Rights	Public Rights of Way Receptor - Wlgm/538 (Wlgm/538/1)			
	Construction Magnitude of Change	Operation Magnitude of Change (Year 1)	Mitigation (Operation Magnitude of Change at Year 15)	Decommissioning Magnitude of Change
	The route is approximately 300m from the Cottam 1 North boundary and therefore would perceive construction effects at this distance.  Construction Access Prow will not be affected by construction traffic due to the distance between the PRoW and the proposed construction access.  Cable Route Corridors PRoW receptor is outside of the 500m cable route corridor study area.  Substation/s The PRoW receptor is within the 2km study area of Cottam 1 north substation.	The route is approximately 300m from the Cottam 1 North boundary, it is not in close proximity to proposed construction access and Cable Route Corridor however it is in close proximity to Cottam 1 North substation substation and therefore would perceive construction effects at this distance.	Primary Mitigation: Panels set back from north and west boundaries of the Cottam 1 North Site.  Secondary Mitigation: New planting on the north and west boundaries of the Cottam 1 North Site.  Notes: Some visibility towards the Abnormal Loads Access (short section on Cot Garth Lane of approximately 70m), but due to the temporary nature of the construction works the effects would be limited. Some minor visibility towards the Cottam 1 South Site due to the intervening hedgerows and individual tree cover bordering Cot Garth Lane and Stone Pit Lane. New planting along the north and west boundaries of the Site/Sites will curtail visibility in Year 1 and help close down views in Year 15.	A similar process to that of construction stage, but with the Scheme being no longer operational. This is an assessment of the Site in winter but assumes retention of existing vegetation and builds upon the proposed primary and secondary mitigation that had been established as the future baseline. Effects are those arising from activities for the duration of the decommissioning to include site traffic, noise and vibration from decommissioning activities, dust generation and site runoff.
Magnitude	Very Low	Very Low	Low	Very Low
Type of Effect	Neutral & Short Term	Neutral & Long Term	Beneficial & Long Term	Neutral & Short Term
Significance of Effect	Negligible <b>Not Significant</b>	Negligible <b>Not Significant</b>	Minor-Moderate <b>Not Significant</b>	Negligible <b>Not Significant</b>

Public Rights of Way Receptor - Wlgm/538 (Wlgm/538/1)		
In-Combination Effects [Cumulative Sites]	Cumulative Effects [Cumulative Developments]	
No Intervisibility	Fabric of the Landscape There would not be the removal of or changes in individual elements or features of the landscape within the character area.	
	There would be the introduction of new elements and features comprising the solar panel areas and the substation area within the character area	
	Aesthetic Aspects of the Landscape Refer to Figure <b>8.15.2.1 [C6.4.8.15.2.1]</b> which shows that with the Cottam 1 Site/Sites, cumulative visibility with the cumulative developments would not be experienced across the majority of the 5km study area. This is due to the distance, the intervening woodlands, hedgerows, and tree cover between the Site/Sites. The intervening settlements and built form would also curtail cumulative visibility.	
	There are local patches of cumulative visibility which may be focus of likely significant effects, between the Cotton 1 Site/Sites and Gate Burton Energy Park, Tillbridge Solar and West Burton Solar Park. This cumulative visibility is set out in further detail within the following figures:	
	<b>Figure 8.15.2.6</b> Cottam 1, 2, 3a and 3b Gate Burton Cumulative Developments Augmented ZTV <b>[C6.4.8.15.2.6] Figure 8.15.2.8</b> Cottam 1, 2, 3a and 3b Tillbridge Solar Cumulative Developments Augmented ZTV <b>[C6.4.8.15.2.8] Figure 8.15.2.9</b> Cottam 1, 2, 3a and 3b West Burton Cumulative Developments Augmented ZTV <b>[C6.3.4.15.2.9]</b>	



Public Rights of Way Receptor - Wlgm/538 (Wlgm/538/1)		
		The landscape is shaped by the wide range of local and strategic road networks, which make one landscape type or area different from another. The strategic major road network is defined by important historic routes and in contrast, the east west minor road network links several historic and distinctive smaller string of settlements across the area. Overall, the prevailing road network is formed by narrow lanes that are often tranquil and hedged to both sides with wide grassed verges and they have a major role in helping to define the quality of the landscape and reducing the visibility across the area.
		Overall Landscape Character and Visual Amenity  Overall, the character of the landscape and the communications and infrastructure is shaped by evidence of historic settlement with farms, nucleated villages, and small hamlets such as Thorpe le Fallows and Coates, which are features value that are not highly recognised for adding intimacy and interest to the landscape. These relevant characteristics of the landscape and land use have some ability to accommodate change without undue adverse effects. The cumulative visibility for the Cottam 1 Site/Sites would not alter the overall character of the landscape and its communications and infrastructure features. Moreover, these features are often set within a well-vegetated context or associated with built form that plays a positive role in reducing the overall cumulative effects.
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Type of Effect	Not Applicable	Construction: Adverse & Short Term Operation (Year 1): Adverse & Long Term Operation (Year 1): with only Embedded Mitigation: Adverse & Long Term Operation (Year 15): Beneficial & Long Term Decommissioning: Neutral & Short Term
Significance of Effect	Not Applicable	Construction: Negligible Not Significant Operation (Year 1): Negligible Not Significant Operation (Year 1): with only Embedded Mitigation: Negligible Not Significant Operation (Year 15): Negligible Not Significant Decommissioning: Negligible Not Significant