

# **Longfield Solar Farm**

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# 1. Landscape Assessment

## 1.1 Introduction

- 1.1.1. Table 1 presents an assessment of the landscape effects likely to arise with respect to the Landscape Character Areas (LCAs) and Local Landscape Character Areas (LLCAs) described in the baseline presented in *Appendix 10C: Landscape Baseline* of the Environmental Statement (ES) [EN010118/APP/6.2], during the construction, operational and decommissioning phases of the Scheme.
- 1.1.2. This consideration of landscape effects assesses the potential effects resulting from the Concept Design. The Concept Design presents a realistic layout in accordance with the Design Principles, within the Rochdale Envelope. Further information regarding the scheme parameters assessed can be found in Section 10.3 of *Chapter 10: Landscape and Visual Amenity* of the ES [EN010118/APP/6.1].
- 1.1.3. A summary of these effects is provided in Section 10.8 of Chapter 10: Landscape and Visual Amenity of the ES. Details of the mitigation measures incorporated (embedded) into the design of the Scheme are described in Chapter 3: Alternatives and Design Evolution of the ES [EN010118/APP/6.1] and Section 10.7 of Chapter 10: Landscape and Visual Amenity of the ES.
- 1.1.4. Embedded mitigation measures are illustrated on Figure 10-12: Outline Landscape Masterplan [EN010118/APP/6.3] and detailed in the Outline Landscape and Ecology Management Plan (OLEMP) [EN010118/APP/7.13].
- 1.1.5. Essential mitigation measures to be implemented during construction of the Scheme are described in the *Outline Construction Environmental Management Plan (OCEMP)* [EN010118/APP/7.10].



# **Table 1: Landscape Assessment**

Landscape
Recentor

Sensitivity (Refer to **Appendix 10C:** Landscape Baseline)

**Assessment** Scenario

Commentary

of Effect

Magnitude Significance

Minor Adverse

(not significant)

#### Essex Landscape Character Assessment (2003)

## LCA B1 Central **Essex Farmland.**

Medium

# Construction (winter)

The whole Order limits is located within LCA B1, which covers an area of Essex. Construction would affect a very limited part of the LCA. This would include the stripping and storage of topsoil, linear excavation of a trench for cabling, construction of the frames and installation of all proposed features.

Construction plant, including boring equipment and lifting machinery would be introduced, and typical construction features such as fencing/hoarding and temporary construction compounds. The presence and activity of construction machinery and associated features (e.g., topsoil piles) would alter the condition of the landscape locally and increase the level of activity in the LCA. The introduction of these features would be temporary, medium term and reversible.

Construction activity would be localised and would not be perceptible from most of the LCA. The tranquil character noted in the baseline would therefore remain unchanged across most of the LCA beyond the Order limits.

# Year 1 (winter)

Physical changes to the landscape would occur across all field parcels occupied by solar panels and associated structures. The new features would occupy a very limited part of the overall LCA. The introduction of the Scheme would result in an increase in infrastructure and therefore a reduction in scenic quality and openness locally. All other key characteristics would remain; the characteristic irregular field pattern and numerous small woodlands would remain unchanged since the Scheme would be sited within the existing field pattern and include offsets from existing vegetation. The scattered settlement pattern would also remain unchanged.

The cable route between the BESS and Bulls Lodge would be below ground and finished with topsoil such that it would be in keeping with the agricultural fields in winter. With reference to Figure 10-15 there would be some targeted vegetation loss along the proposed cable route, however the effect would be very localised in comparison with the wider LCA.

Additional planting would be introduced across Work No. 6 and 10. Whilst the majority of this planting would not have established, the Advanced Mitigation Planting and Construction Day 1 Planting (shown on Figure 10-14) would begin to make a contribution to the landscape structure, in particular improving fragmented hedgerows. However, similarly to the vegetation loss, the effect of additional vegetation would be very localised.

The Scheme would enhance recreational access to the countryside through the delivery of a new permissive route through the Order limits from north to south. This route would intersect with existing footpaths (213 19, 213 18, 213 4, 113 25, 113 33 and the Essex Way) providing greater permeability across the local landscape.

The perception of the Scheme from the wider LCA would be limited by existing topography and vegetation and effects would be localised to a very small part of LCA B1.

# Year 15 (summer)

The grassland beneath the panels would have established into a continuous sward and the proposed hedgerow infilling and new trees would have established. This planting, together with existing vegetation, would enclose the solar panels, BESS, substation and associated structures and form connections between woodlands, improving the landscape structure and providing ecological connectivity. However, the reduction in scenic quality and tranquillity resulting from the introduction of new infrastructure in the landscape would persist, albeit very locally within the LCA.

The effects resulting from the Scheme would be very limited in relation to the wider extent of the character area.

The effects of the built elements of the Scheme would be reversible. The planting is not intended to be removed at the end of the operation of the Scheme.

# Decommissioning (winter)

The activities involved in decommissioning would generally reflect those considered for construction, including the presence of large machinery, fencing and removal of infrastructure. These activities would be short term and reversible. However, the excavation of the cable route would not be necessary (given that it would be ducted) and the extension to Bulls Lodge Substation would remain in place. The physical extent of land affected would therefore be less than during construction. The perception of decommissioning from the wider LCA would also be less than that resulting from construction given the enhanced and established vegetation structure, which is not intended to be removed as part of decommissioning. The grassland under the panels would be lost as the land would be returned to arable agriculture.

Change would be temporary, short term and reversible.

# Very low

Low

Negligible Adverse (not significant)

Negligible Adverse (not significant)

Very low

Negligible Adverse (not significant)



Landscape Receptor	Sensitivity (Refer to Appendix 10C: Landscape Baseline)	Assessment Scenario	Commentary	Magnitude of Effect	Significance	
LCA C6 Blackwater/Brai n and Lower Chelmer Valleys.	Medium	All	The Scheme would not be located in LCA C6. The Scheme would not alter the key characteristics or the perception of the LCA. There would be no effect to this LCA during any of the assessment scenarios due to the distance from the Scheme and intervening features such as blocks of woodland and the A12.		Neutral	
LCA D3 Danbury Hills.	Medium	All	The Order limits is not located in LCA D3 and therefore there would be no physical change to the landscape. Views across the Chelmer valley are noted as being a key characteristic of LCA D3 in the Essex Landscape Character Assessment. The Order limits is not located within the Chelmer Valley and therefore this key characteristic would not be affected. There would be no discernible change to the perceptual qualities of the LCA in any of the assessment scenarios due to the distance from the Scheme and intervening features such as blocks of woodland and the A12.		Neutral	
LCA G2 Chelmsford and Environs.	Medium	All	The Scheme would not be located in LCA G2. The Scheme would not alter the key characteristics or the perception of the LCA. There would be no effect to this LCA during any of the assessment scenarios due to the intervening distance from the Scheme and intervening features such as blocks of woodland and the A12.	None	Neutral	
			Braintree, Brentwood, Chelmsford, Maldon And Uttlesford Landscape Character Assessment (2006)			
LCA A7 Lower Chelmer River Valley.	High	All	The Scheme would not be located in LCA A7 and would not alter the key characteristics or the perception of the LCA. There would be no effect to this LCA during any of the assessment scenarios due to the intervening distance from the Scheme and intervening features such as blocks of woodland and the A12.	None	Neutral	
LCA B17 Terling Farmland Plateau.	Medium	Medium	Construction (winter)	The majority of the Order limits is located within LCA B17. Construction would be localised, comprising changes to landform and land use, including excavation of a trench for cabling, topsoil stripping and temporary storage of materials. Construction would increase the level of activity in the LCA, reducing the level of tranquillity in, and in proximity to, the Order limits. The irregular field pattern, scattered settlement pattern and sensitive features such as areas of ancient woodland would be protected through the implementation of protective buffers and the measures set out in the CEMP.	Low	Minor Adverse (Not significant)
			Construction plant, including lifting equipment and typical construction features such as fencing/hoarding and site offices would be introduced. The presence and movement of construction machinery and associated features (e.g., topsoil piles) would alter the condition of the landscape locally. There would be the perception of the construction activity in the parts of the LCA adjacent to the Order limits, reducing the level of tranquillity locally. These effects would not be perceptible across the majority of the LCA.			
		Year 1 (winter)	Physical change would be limited to 5% of the total area of LCA B17, resulting from the introduction of solar arrays across the majority of the Order limits. The BESS and substation would be located in PDA 33 and therefore would be enclosed by Toppinghoehall Wood and Lost Wood, limiting their impact on the wider LCA.	Low	Minor adverse (Not significant)	
			Most key characteristics would remain unchanged, including the topography, irregular field pattern, blocks of small woodland and the scattered settlement pattern; however, the introduction of new infrastructure into the arable landscape would locally reduce the level of tranquillity. The perception of the Scheme from beyond the Order limits would be very limited.			
			The Scheme would enhance recreational access to the countryside through the delivery of a new permissive route through the Order limits from north to south. This route would intersect with the existing PRoW network (Footpaths: 213_19, 213_18, 213_4, 113_25, 113_33 and the Essex Way) delivering a greater permeability across the local landscape.			
		Year 15 (summer)	The physical changes to LCA B17 would remain as for year 1 of operation as a result of the presence of the solar panels, associated structures, BESS and substations.	Very low	Negligible Adverse (not	
			The species rich grassland beneath the panels would have established into a continuous sward underneath the solar panel array improving the vegetation cover in comparison to the intensive agricultural fields which is considered beneficial and balanced with the continued presence of the built elements of the Scheme.		significant)	
			Newly planted and improved hedgerows would be established and maintained at 3m tall, which would, along with the establishment of the proposed woodland, provide an improved landscape structure and enclosure to the Order limits. Collectively, the new planting would reduce the perception of the Scheme from the wider LCA and also respond positively to land management guidelines in the published assessments, enhancing the existing hedgerow pattern and managing the ecological structure of woodlands.			



Landscape Receptor	Sensitivity (Refer to Appendix 10C: Landscape Baseline)	Assessment Scenario	Commentary	Magnitude of Effect	Significance
			The Scheme would partially alter the character of the but would also deliver an improved hedgerow pattern and an enhanced ecological network of woodland, in line with the land management guidelines for LCA B17.		
		Decommissioning (winter)	The activities relating to decommissioning would be similar to construction, although the perception of the change from the wider LCA would be reduced given the maturity of the proposed vegetation which would reduce the perception of decommissioning from the wider LCA. Effects would be short term and reversible.	Very low	Negligible Adverse (not significant)
			New planting would be mature and would provide beneficial long-term effects, providing enhanced structure and ecological connectivity to the LCA.		
LCA B21	Low	Construction	The southernmost part of the Order limits is located within LCA B21.		Minor Adverse (Not significant)
Boreham Farmland Plateau		(winter)	Construction impacts would result from the installation of underground cable to tie into the grid at Bull's Lodge. This would require some excavation, resulting in a temporary change to the existing landform up to 20m in width, whilst other sections of the route under Porter's Grove and Boreham Brook would be installed via Horizontal Directional Drilling. Boring and lifting equipment, material storage and associated plant would be introduced along the route temporarily. With reference to <b>Figure 10-15</b> , construction would also include the selective removal of sections of hedgerows and semi-mature trees.		
			Vegetation to be retained would be protected in accordance with the Construction Environmental Management Plan.		
			The construction of the substation extension at Bulls Lodge would temporarily introduce tall lifting equipment and result in intensive activity.		
			The impacts described above would be short in duration.		
			Two temporary pylons would be introduced, one immediately north and the second immediately south of Bulls Lodge Substation. The pylons would be in place for up to four years and therefore their impact would be for the medium term. However, they would be located amongst the existing, and taller, pylons in this part of LCA B21 such that they would not be incongruous in the landscape.		
			Construction would be focussed in a small part of LCA B21 and would not be perceptible south of the A12. These temporary activities would not be incongruous in the context of existing mineral extraction.		
		Year 1 (winter)	The cable route extending from the BESS, located within the adjacent LCA, would be underground. The loss of vegetation, shown on <b>Figure 10-15</b> , would result in the introduction of a 5m corridor through Porters Grove. This would be a very slight alteration to the existing landscape pattern relative to the scale of the LCA. The extension to the substation at Bull's Lodge would be in keeping with existing land use and would be barely perceptible from the wider LCA on account of The Grove woodland to the west, and local changes in topography.	Very low	Negligible Adverse (Not significant)
			The wider Scheme, including the solar panels and associated features, would be located in the adjacent LCA. Existing intervening features, particularly existing vegetation flanking Waltham Road, would limit effects on the wider LCA.		
		Year 15 (summer)	The grassland and replacement planting along the cable route would have established such that the route would not be perceptible. The extension to the substation would be in keeping with the existing land use and structures and would be further enclosed by the establishment of planting.	Very low	Negligible Adverse
					(Not significant)
		Decommissioning (winter)	The underground cable would be removed; however, this would not require excavation or vegetation removal since the cable would be ducted. The substation extension would remain in situ.	None	Neutral
			There would be no change to the key characteristics or components of the LCA.		
LCA F5 Little Baddow and Danbury Wooded Farmland	Medium	All	The Order limits is not located in LCA F5 and therefore there would be no physical change to the landscape. Views across the Chelmer/Blackwater Valley are noted as being a characteristic of LCA F5. The Order limits is not located within the Chelmer or Blackwater Valley. There would be no discernible change to the perceptual qualities of the LCA. There would be no effect to this LCA during any of the assessment scenarios due to the intervening distance from the Scheme and intervening features such as blocks of woodland and the A12.	None	Neutral

**Local Landscape Character Areas** 



Landscape Receptor	Sensitivity (Refer to Appendix 10C: Landscape Baseline)	Assessment Scenario	Commentary	Magnitude of Effect	Significance
LLCA 01 Great Leighs Farmland Plateau	Medium	All	The Scheme would not be located in LLCA 01 and would not alter the perception of its character due to intervening distance and vegetation lining the road network and field boundaries. There would be no effect to this LLCA during any of the assessment scenarios.	None	Neutral
LLCA 02 Western Farmland	Medium	Construction (winter)	The majority of the Order limits is located within LLCA 02 and therefore construction effects would result from the installation of the solar arrays and associated features. The substation and BESS would not be located in LLCA 02 and therefore their construction would not physically alter the area.	Medium	Moderate Adverse (Significant)
Plateau			Installation of the solar array and associated features would require localised changes to landform, including linear excavation of a trench for cabling. Sensitive features such as areas of ancient woodland would be protected and remain unchanged.		
			Construction plant, including boring equipment and lifting machinery and typical construction features such as fencing/hoarding would be introduced. The main Order limits entrance would be introduced, with access tracks created across the Order limits. The main construction compound would be located in PDA 20 in the south of the LLCA. Further satellite compounds would be located within the LLCA (within the Order limits boundary). Mobile lighting towers would also be introduced; however, these would only be used during core working hours such that there would not be any change to the areas of relatively dark night skies identified in the baseline.		
			The presence and activity of construction machinery and associated features (e.g. topsoil piles) would degrade the condition of the LLCA and increase the level of activity.		
			The introduction of these features would be temporary, medium term and reversible.		
			Construction would alter a wide area at a local level but would not result in the permanent loss of key features such as the overall landscape structure or areas of ancient woodland.		
		Year 1 (winter)	The section of the Order limits within LLCA 02 would be occupied by solar panels, inverters and a security building at the Order limits entrance on the edge of PDA 19/22. The Scheme would also include new planting within the LLCA. The advanced mitigation planting proposed to improve the structure of hedgerows across LLCA 02 would be approximately five years old, and therefore make a small improvement to the structure of the hedgerow network. The remaining planting (planted at the beginning of construction and at the end of construction) would not yet be established.	Medium	Moderate Adverse (Significant)
			Many key features would be maintained, including the undulating landform, woodlands and landscape pattern. However, the Scheme would result in the loss some key characteristics, namely the agricultural character and a reduction in the sense of openness given the change of land use and the introduction of new built features in the landscape. The proposed lighting within LLCA 02 would be located at the site entrance and operations building. This lighting would be used once a day for a short period, allowing site personnel to leave site, and therefore would not alter the relatively dark skies that characterise the night sky.		
			Solar panels and associated features would occupy approximately 14% of the total area of LLCA 02. The Scheme would be perceptible from areas of LLCA 02 adjacent to the Order limits, affecting up to half of the LLCA, but would not affect the wider LLCA on account of the screening effect of existing field boundary hedgerows and woodlands across the relatively flat landscape.		
			New recreational access through the Order limits, via a permissive path, would also be introduced providing a north/south walking route and improving the connectivity of the wider PRoW network. The permissive path would link into footpaths: 213_4, 113_25, 113_33 and the Essex Way.		
		Year 15 (summer)	The proposed planting would be established, creating a strong landscape framework and integrating the built elements of the Scheme into the landscape pattern and improving ecological connectivity. This would further reduce the area of LLCA 02 from which the Scheme is perceptible. Compared to year 1, the species rich grassland beneath the panels would have established into a continuous sward underneath the solar panel arrays. It would also provide an established framework for the new recreational access across the Order limits. Considering the restricted area of the LLCA physically changed by the Scheme (approximately 14%) and the reduction in the perception of the change from the wider LLCA, the magnitude of effect would reduce from year 1.	Low	Minor Adverse (Not significant)
		Decommissioning (winter)	Impacts arising from the physical decommissioning of the Order limits would be similar in scale and activity to construction but would be shorter in duration. The Scheme's planting would be mature and would not be removed as part of the decommissioning of the Scheme. If that planting remains as a permanent feature of the landscape there would be further strengthening of the framework of field boundary hedgerows and blocks of woodland, resulting in a permanent improvement to landscape character. The established planting would help to reduce the perception of decommissioning in the wider LLCA. Decommissioning would result in a partial change to the LLCA. The grassland sward that would have established on Order limits would be altered as the Order limits is returned to agricultural use.	Low	Minor Adverse (Not significant)



Landscape Receptor	Sensitivity (Refer to Appendix 10C: Landscape Baseline)	Assessment Scenario	Commentary	Magnitude of Effect	Significance
LLCA 03 Ter Valley North	High	Construction (winter)	The design has minimised the impacts on LLCA 03 by excluding land north of the River Ter from any development and not introducing any physical change to the landscape below the 40m contour.	Low	Minor Adverse (not significant)
			Construction of the solar arrays would occur in part of PDA 1, within LLCA 03, physically affecting approximately 1% of the LLCA. Localised excavation would be required to install the module mounting structures and solar stations. Cranes would be introduced to lift equipment into position. The construction activity would reduce the settled and tranquil character of the LLCA locally. All other key characteristics would remain unchanged. Construction activity would be perceptible from the northern side of the River Ter Valley in proximity to Fuller Street but the wider area would remain unaffected.		
			This change would be temporary, short term and reversible.		
		Year 1 (winter)	The solar array in LLCA 03 would occupy approximately 1% of the LLCA. Ecological enhancement, as set out in the Outline Landscape and Ecological Management Plan, would occur across the remaining land within the Order Limits. This would include an area of advanced mitigation planting along the northern edge of PDA 1 which would reinforce the existing field pattern. The topography and existing vegetation, in particular Lyonshall Spring, Terling Spring and Sandy Wood would enclose the Scheme such that it would be barely perceptible from the valley floor of the wider LLCA from the east and west. However, the Scheme would be perceptible from a limited part of the northern side of the Ter River Valley in proximity to Fuller Street. The change would therefore be a very slight alteration to landscape character, introducing new infrastructure in the place of arable land, in proximity to the existing pylons and overhead lines that cross the LLCA. No lighting would be proposed within LLCA 03. Most of the LLCA would remain unaffected.	Low	Minor Adverse (not significant)
		Year 15 (summer)	By year 15 the proposed mitigation planting would be established such that the perception of the Scheme from the northern side of the River Ter Valley would be reduced. The physical change to approximately 1% of the LLCA would remain as reported for year 1, however the grassland sward beneath the panels and the proposed scrub planting would have established, enhancing the local green infrastructure network.	Very low	Negligible adverse (not significant
		Decommissioning (winter)	The effects relating to decommissioning would largely reflect those resulting from construction.	Low	Minor Adverse (not significant)
LLCA 04 Eastern Farmland Plateau	Medium	All	The design has minimised the impact on this LLCA and the adjacent River Ter by excluding land within, or north of, the Ter valley from any development. There would be no physical or perceptual change to LLCA 04 in any of the assessment scenarios.	None	Neutral
LLCA 05 Terling	High	All	The Order limits is not located in LLCA 05 and therefore there would be no physical change to the landscape.	None	Neutral
			Construction of the Scheme would be largely enclosed by vegetation on the boundary of LLCA 05 and would be imperceptible from the vast majority of the LLCA. No key characteristics would be affected. There would be no change to the character of LLCA 05 in any of the assessment scenarios.		
LCA 06 Ter	Medium	All	The Order limits is not located in LLCA 06 and therefore there would be no physical change to the landscape.	None	Neutral
Valley South			The Scheme would not change the character of LLCA 06 on account of the enclosed character of the LLCA and intervening features between the LLCA and the Order limits boundary. No change would occur in any of the assessment scenarios.		
LLCA 07 Toppinghoehall Woods	Medium	Construction (winter)	The southern part of the Order limits covers part of LLCA 07. Construction activity would include the installation of the solar arrays, BESS and Longfield substation. This would require localised changes to landform, including linear excavation of a trench for cabling. Construction plant, including boring equipment and lifting machinery would be introduced, and typical construction features such as fencing/hoarding, access tracks and satellite construction compounds would be laid out. The presence and activity of construction machinery and associated features (e.g. topsoil piles) would degrade the condition of the LLCA. Construction of the Longfield substation would include the installation of concrete foundations, installation of switchgear and control buildings, transformers and ancillary features.	Medium	Moderate Adverse (significant)
			The introduction of these features would be temporary, medium term and reversible. Perception of construction of the BESS and Longfield substation from the wider LLCA would be limited by existing woodland.		
			There would be a large alteration to the LLCA locally, however much of the LLCA would remain unchanged. Construction would not result in the permanent loss of key features, such are the overall landscape structure and areas of ancient woodland.		



Landscape Receptor

Sensitivity (Refer to **Appendix 10C:** Landscape Baseline)

**Assessment Scenario** 

Commentary

of Effect

Magnitude Significance

Year 1 (winter)

The section of the Order limits within LLCA 07 would be occupied by solar panels, inverters, the BESS, Longfield Substation and a section of the cable route. These features would occupy approximately 15% of the LLCA. Introduction of these features would result in a loss of openness, tranquillity and agricultural character over a restricted area. The remaining key characteristics, including large deciduous woodlands, would remain unchanged. The perception of the Scheme across the wider LLCA would be limited by Toppinghoehall Wood and Lost Wood. Lighting would be introduced at Longfield substation, typically turned on once per day when site personnel leave site. Since the LLCA comprises areas of brighter skies at night the introduction of occasional lighting would not alter the character of the night sky.

Medium Moderate Adverse

(Significant)

There would be targeted vegetation loss, comprising three 10m wide gaps in hedgerows east of Waltham Road, above the cable route, as shown on Figure 10-15. The Scheme would also introduce new planting within the LLCA. The linear woodland proposed to be advanced mitigation planting, linking Toppinghoehall Woods, would be starting to establish but not yet comprise a mature woodland. New recreational access through the Order limits, via a permissive path, would also be introduced providing a north/south walking route linking footpath 213 19 with 213 18.

Overall, the Scheme would be incongruous to the baseline character but affect a restricted area of the LLCA.

Construction phase 2 (winter) Construction of the second phase of the BESS would occur five years following the beginning of operation. By this time the proposed advanced planting of the 25m woodland buffer east of the BESS would have grown to be between c. 3.5 – 4.5m tall. This vegetation would reduce the perception of construction in the wider LLCA, such that impacts would be very localised, resulting from the physical change to the landscape. Construction would be short term and the change resulting from construction would be reversible.

Very low

Negligible Adverse (not significant)

Year 15 (summer)

The established planting would include approximately 2.9ha of new woodland which would strengthen landscape character and improve ecological connectivity through joining Toppinghoehall Woods to Lost Wood. It would also provide an established framework for the new recreational access provided across the Order limits. The species rich grassland beneath the panels would have established into a continuous sward underneath the solar panel array but this would not extend into the BESS compound or substation.

Minor Adverse (Not significant)

The impact would be long term and reversible (other than the proposed planting which would not be removed as part of decommissioning).

The beneficial change resulting from the establishment of woodland connections would reduce the significance of the adverse effect resulting from the presence of the Scheme's built elements.

Low

Minor Adverse (Not significant)

Decommissioning (winter)

Impacts arising from the physical decommissioning of the Order limits would be similar in scale and activity construction; however, the proposed woodland planting would be mature, reducing the perception of decommissioning from the wider LLCA. The grassland sward that would have established on Order limits would be removed and the fields returned to agriculture.

Medium

Minor Adverse

LLCA 08 **Boreham North**  Very low

Construction (winter)

The Order limits are located in LLCA 08.

No solar panels would be laid out within the LLCA and construction would be limited to the installation of underground cables and the extension of the Bulls Lodge substation. Cable installation would require some excavation, resulting in a very localised alteration to the existing landform and vegetation removal, up to 5m in width through Porters Grove and 10m in width through a triangle of woodland north of Boreham Brook, as shown on Figure 10-15. Boring equipment, hoarding and associated plant and machinery would be introduced into the LLCA. The construction of the substation at Bulls Lodge would introduce a temporary construction compound and would require tall lifting equipment. Construction of the required foundations and addition of the substation equipment would alter the surface of the LLCA.

(not significant)

Existing vegetation along Waltham Road and The Grove woodland, west of Bulls Lodge Substation, would limit the geographical extent of effects on perceptual qualities across the wider LLCA.

The impacts described above would be short in duration.

Two temporary pylons would be introduced, one immediately north and the second immediately south of Bulls Lodge Substation. The pylons would be in place for up to four years and therefore their impact would be for the medium term. However, they would be located amongst the existing, and taller, pylons in this part of LLCA 08 such that they would not be incongruous in the landscape.

Year 1 (winter)

The cable route would be underground. Whilst the grassland proposed on top of the route wouldn't be established this would be in keeping with the character of agricultural fields in winter. With reference to Figure 10-15 a 5m wide corridor would cross Porter's Grove Woodland, and a 10m wide corridor would cross a triangle of woodland north of Boreham Brook. The loss of this vegetation would alter the composition of the woodland,

Low

Negligible Adverse (not significant)



Landscape Receptor	Sensitivity (Refer to Appendix 10C: Landscape Baseline)	Assessment Scenario	Commentary	Magnitude of Effect	Significance
			degrading the condition of the landscape locally. The extension to the substation at Bull's Lodge, with associated temporary lighting, would be in keeping with existing land use and therefore be a small change to local character.		
			The wider Scheme, including the solar panels and associated features, would be located in the adjacent LCA. However, existing intervening features, particularly existing vegetation flanking Waltham Road, would limit effects in the wider landscape.		
		Year 15 (summer)	The woodland glade species rich grassland seeded in the corridors through Porter's Grove Woodland and the woodland north of Boreham Brook would have established. This would introduce species and structural diversity to the woodland, however the altered composition of the woodland described for year 1 would remain.	Low	Negligible Adverse (not significant)
			Other impacts would remain as described for year 1.		
		Decommissioning (winter)	The underground cable would be removed. However, this would not require excavation or vegetation removal since the cable would be ducted. The substation extension would remain.	None	Neutral
LLCA 09 Chelmsford North	Medium	All	The Scheme would not be located in LLCA 09 and would not alter the perception of the LLCA due to the effect of distance and intervening vegetation. There would be no effect to this LCA during any of the assessment scenarios.	None	Neutral
LLCA 10 Boreham and Hatfield Peverel	Low	All	The Scheme would not be located in LLCA 10 and would not alter the character of the LLCA given that A12 road corridor and railway between Chelmsford and Witham which form a line of severance in the landscape. The road and railway are in cutting such that there would be no perception of change.	None	Neutral
			There would be no effect to this LCA during any of the assessment scenarios.		
LLCA 11 Boreham South Farmland Plateau	Medium	All	The Scheme would not be located in this LLCA and would not alter the perception of the LLCA due to the effect of distance and intervening vegetation. There would be no effect to this LCA during any of the assessment scenarios.	None	Neutral
LLCA 12 Chelmer Valley	High	All	The Scheme would not be located in this LLCA and would not alter the perception of the LLCA due to the effect of distance and intervening vegetation. There would be no effect to this LCA during any of the assessment scenarios.	None	Neutral
LLCA 13 Little Baddow	Medium	All	The Scheme would not be located in this LLCA and would not alter the perception of the LLCA due to the effect of distance and intervening vegetation. There would be no effect to this LCA during any of the assessment scenarios.	None	Neutral