

# **East Anglia ONE North Offshore Windfarm**

## **Appendix 29.4** Visual Assessment

### **Environmental Statement Volume 3**

Applicant: East Anglia ONE North Limited  
Document Reference: 6.3.29.4  
SPR Reference: EA1N-DWF-ENV-REP-IBR-000366\_004 Rev 01  
Pursuant to APFP Regulation: 5(2)(a)

Author: Royal HaskoningDHV  
Date: October 2019  
Revision: Version 1

Revision Summary				
Rev	Date	Prepared by	Checked by	Approved by
01	08/10/2019	Paolo Pizzolla	Julia Bolton	Helen Walker

Description of Revisions			
Rev	Page	Section	Description
01	n/a	n/a	Final for Submission

## Table of Contents

<b>29.4</b>	<b>Visual Assessment</b>	<b>1</b>
29.1	Matters scoped out of the EIA	1
29.2	Preliminary Assessment	1
29.3	Technical Assessment	18
29.4	Technical Assessment (Alternate Onshore Substation Location)	73

**Appendix 29.4** is supported by the tables listed below.

Table Number	Title
<b>Table A29.1</b>	Preliminary Assessment of Viewpoints (onshore substation and National Grid substation)
<b>Table A29.2</b>	Preliminary Assessment of Settlements (onshore substation and National Grid substation)
<b>Table A29.3</b>	Preliminary Assessment of Transport Routes (onshore substation and National Grid substation)
<b>Table A29.4</b>	Preliminary Assessment of Recreational Routes (onshore substation and National Grid substation)
<b>Table A29.5</b>	Preliminary Assessment of Settlements (onshore cable route)
<b>Table A29.6</b>	Preliminary Assessment of Transport Routes (onshore cable route)
<b>Table A29.7</b>	Preliminary Assessment of Recreational Routes (onshore cable route)
<b>Table A29.8</b>	Preliminary assessment of settlements (landfall)
<b>Table A29.9</b>	Preliminary Assessment of Transport Routes (landfall)
<b>Table A29.10</b>	Preliminary Assessment of Recreational Routes (onshore cable route)
<b>Table A29.11</b>	Operational Visual Effects of Onshore cable route
<b>Table A29.12</b>	Visual effects of onshore cable route on settlements
<b>Table A29.13</b>	Visual effects of onshore cable route on transport routes
<b>Table A29.14</b>	Visual effects of onshore cable route on recreational routes
<b>Table A29.15</b>	Visual effects of landfall on settlements
<b>Table A29.16</b>	Visual effects of landfall on transport routes
<b>Table A29.17</b>	Visual effects of landfall on recreational routes

## Glossary of Acronyms

EIA	Environmental Impact Assessment
ETG	Expert Topic Group
LCT	Landscape Character Types
ZTV	Zone of Theoretical Visibility

## Glossary of Terminology

Applicant	East Anglia ONE North Limited.
Cable sealing end compound	A compound which allows the safe transition of cables between the overhead lines and underground cables which connect to the National Grid substation.
Cable sealing end (with circuit breaker) compound	A compound (which includes a circuit breaker) which allows the safe transition of cables between the overhead lines and underground cables which connect to the National Grid substation.
Construction consolidation sites	Compounds associated with the onshore works which may include elements such as hard standings, lay down and storage areas for construction materials and equipment, areas for vehicular parking, welfare facilities, wheel washing facilities, workshop facilities and temporary fencing or other means of enclosure.
Development area	The area comprising the onshore development area and the offshore development area (described as the 'order limits' within the Development Consent Order).
East Anglia ONE North project	The proposed project consisting of up to 67 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.
East Anglia ONE North windfarm site	The offshore area within which wind turbines and offshore platforms will be located.
European site	Sites designated for nature conservation under the Habitats Directive and Birds Directive, as defined in regulation 8 of the Conservation of Habitats and Species Regulations 2017 and regulation 18 of the Conservation of Offshore Marine Habitats and Species Regulations 2017. These include candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation and Special Protection Areas.
Evidence Plan Process	A voluntary consultation process with specialist stakeholders to agree the approach to the EIA and the information required to support HRA.
Horizontal directional drilling (HDD)	A method of cable installation where the cable is drilled beneath a feature without the need for trenching.
HDD temporary working area	Temporary compounds which will contain laydown, storage and work areas for HDD drilling works.
Jointing bay	Underground structures constructed at intervals along the onshore cable route to join sections of cable and facilitate installation of the cables into the buried ducts.
Landfall	The area (from Mean Low Water Springs) where the offshore export cables would make contact with land, and connect to the onshore cables.
Link boxes	Underground chambers within the onshore cable route housing electrical earthing links.
Mitigation areas	Areas captured within the onshore Development Area specifically for mitigating expected or anticipated impacts.
National electricity grid	The high voltage electricity transmission network in England and Wales owned and maintained by National Grid Electricity Transmission
National Grid infrastructure	A National Grid substation, cable sealing end compounds, cable sealing end (with circuit breaker) compound, underground cabling and National Grid overhead line realignment works to facilitate connection to the national

	electricity grid, all of which will be consented as part of the proposed East Anglia ONE North project Development Consent Order but will be National Grid owned assets.
National Grid overhead line realignment works	Works required to upgrade the existing electricity pylons and overhead lines (including cable sealing end compounds and cable sealing end (with circuit breaker) compound) to transport electricity from the National Grid substation to the national electricity grid.
National Grid overhead line realignment works area	The proposed area for National Grid overhead line realignment works.
National Grid substation	The substation (including all of the electrical equipment within it) necessary to connect the electricity generated by the proposed East Anglia ONE North project to the national electricity grid which will be owned by National Grid but is being consented as part of the proposed East Anglia ONE North project Development Consent Order.
National Grid substation location	The proposed location of the National Grid substation.
Natura 2000 site	A site forming part of the network of sites made up of Special Areas of Conservation and Special Protection Areas designated respectively under the Habitats Directive and Birds Directive.
Onshore cable corridor	The corridor within which the onshore cable route will be located.
Onshore cable route	This is the construction swathe within the onshore cable corridor which would contain onshore cables as well as temporary ground required for construction which includes cable trenches, haul road and spoil storage areas.
Onshore cables	The cables which would bring electricity from landfall to the onshore substation. The onshore cable is comprised of up to six power cables (which may be laid directly within a trench, or laid in cable ducts or protective covers), up to two fibre optic cables and up to two distributed temperature sensing cables.
Onshore development area	The area in which the landfall, onshore cable corridor, onshore substation, landscaping and ecological mitigation areas, temporary construction facilities (such as access roads and construction consolidation sites), and the National Grid Infrastructure will be located.
Onshore infrastructure	The combined name for all of the onshore infrastructure associated with the proposed East Anglia ONE North project from landfall to the connection to the national electricity grid.
Onshore preparation works	Activities to be undertaken prior to formal commencement of onshore construction such as pre-planting of landscaping works, archaeological investigations, environmental and engineering surveys, diversion and laying of services, and highway alterations.
Onshore substation	The East Anglia ONE North substation and all of the electrical equipment within the onshore substation and connecting to the National Grid infrastructure.
Onshore substation location	The proposed location of the onshore substation for the proposed East Anglia ONE North project.
SuDS – Sustainable Drainage System	Approaches to manage surface water that take account of water quantity (flooding), water quality (pollution) biodiversity (wildlife and plants) and amenity
Transition bay	Underground structures at the landfall that house the joints between the offshore export cables and the onshore cables.

## 29.4 Visual Assessment

### 29.1 Matters scoped out of the EIA

1. The Planning Inspectorate has provided comments in their Scoping Opinion (Planning Inspectorate 2017) on matters that can be scoped out of the Environmental Impact Assessment (EIA) and has agreed that the following landscape and visual matters can be scoped out of the assessment:
  - Landscape and visual effects of the landfall during operation; and
  - Landscape and visual effect of the onshore cable route during operation (with the exception of the removal of woodland at the Aldeburgh Road crossing (woodland north of Fitches Lane) which is assessed as an operational effect).
2. In both cases, following remediation works, the underground infrastructure at the landfall and within the onshore cable route is unlikely to result in significant effects and these matters can be scoped out of the assessment, as agreed with the Planning Inspectorate. These matters are not assessed any further in the technical assessments in **Appendix 29.3 – 29.5** or in **Chapter 29 Landscape and Visual Impact Assessment**.

### 29.2 Preliminary Assessment

#### 29.2.1 Defining Study Area

3. The LVIA study area extends to a 3km buffer beyond the edge of the onshore development area and is shown in **Figure 29.1**. This study area has been agreed for the LVIA as part of the SLVIA Expert Topic Group (ETG) consultations and submission of the Scoping Report (SPR 2017). The LVIA study area defines a limit, based on professional judgement, beyond which it is considered unlikely for significant effects of development within the LVIA study area to arise. This judgement is based on knowledge of similar projects, an understanding of the character of the local landscape and the scale of the construction and development proposed within the onshore study area.

#### 29.2.2 Impact Assessment Scenarios

4. This appendix provides a project alone assessment of the landscape impact of the proposed East Anglia ONE North project onshore infrastructure i.e. the impact of the onshore substation, National Grid infrastructure and onshore cable route.
5. The detailed technical assessment of the visual effects of the proposed East Anglia ONE North project onshore infrastructure set out in **section 29.3** is based upon the assumption that the proposed East Anglia ONE North project will use the intended onshore substation location.



6. **Section 29.4** provides a detailed technical assessment of the visual effects of the proposed East Anglia ONE North project onshore infrastructure in the eventuality that the proposed East Anglia ONE North project uses the alternative substation location, as allowed for in the draft DCO.
7. Cumulative impact assessment scenarios of the proposed East Anglia ONE North project and proposed East Anglia TWO project are assessed separately in **Appendix 29.5**.

### 29.2.3 Potential Impacts during Construction and Operation

8. A preliminary assessment of the potential effects of the onshore infrastructure visual receptors and viewpoints in the study area has been undertaken using ZTV analysis (**Figure 29.9**) and site survey, to identify which of the visual receptors and viewpoints are likely to be affected by the proposed East Anglia ONE North project onshore infrastructure. This preliminary assessment is presented in **sections 29.2.3.1 to 29.2.3.3**, which identifies the visual receptors and viewpoints that have the potential to undergo significant effects as a result of the proposed East Anglia ONE North project onshore infrastructure and require to be assessed in full; and those that do not have potential to undergo potential significant effects that can be scoped out of further assessment.
9. The preliminary assessment which follows in **sections 29.2.3.1 to 29.2.3.3** considers the potential visual effects of each of the onshore substation and National Grid substation during the construction and operational stage, and the onshore cable route and landfall during the construction stage. The removal of woodland at the Aldeburgh Road crossing (woodland north of Fitches Lane) due to the onshore cable route is assessed as an operational effect.

#### 29.2.3.1 Onshore Substation and National Grid Substation

##### 29.2.3.1.1 Preliminary Assessment – Viewpoints

10. A preliminary assessment of the potential visual effects of the onshore substation and National Grid substation from agreed representative viewpoints within the study area (**Figure 29.4** and **Figures 29.13-29.25**) is presented in **Table A29.1**. Effects arising from the onshore cable route construction have been factored into the viewpoint assessment where visible in the view.

**Table A29.1 Preliminary Assessment of Viewpoints (onshore substation and National Grid substation)**

Viewpoint	Grid Reference	Distance from the onshore substation (km)	Distance from the National Grid substation (km)	Potential influence of the onshore substation / National Grid substation	Preliminary Assessment	
<b>Representative viewpoints</b>						
1	Public Right of Way (PRoW) near Friston House <i>(Figure 29.13)</i>	641169 260794	0.21	0.35	The onshore substation and National Grid substation likely to be highly visible.	Potential for significant effects that require further assessment.
2	Friston, Church Road <i>(Figure 29.14)</i>	641319 260543	0.40	0.60	The onshore substation and National Grid substation likely to be highly visible.	Potential for significant effects that require further assessment.
3	Grove Road, near Pear Tree Farm <i>(Figure 29.15)</i>	641657 261801	0.66	0.45	Likely to be limited visibility of the onshore substation and National Grid substation due to extensive screening by intervening woodland.	No potential for significant effects - scoped out of further assessment.
4	Friston, Grove Road <i>(Figure 29.16)</i>	641498 260531	0.46	0.67	The onshore substation and National Grid substation likely to be partially visible	Potential for significant effects that require further assessment.
5	PRoW, near Moor Farm <i>(Figure 29.17)</i>	640884 261654	0.64	0.47	The onshore substation and National Grid substation likely to be highly visible.	Potential for significant effects that require further assessment.
6	Friston, Village Green <i>(Figure 29.18)</i>	641198 260337	0.62	0.81	The onshore substation and National Grid substation likely to be partially visible.	Potential for significant effects that require further assessment.
7	PRoW, east of Friston <i>(Figure 29.19)</i>	641877 260560	0.64	0.85	Likely to be limited/no visibility of the onshore substation and National Grid substation due to extensive	No potential for significant effects - scoped out of further assessment.

Viewpoint	Grid Reference	Distance from the onshore substation (km)	Distance from the National Grid substation (km)	Potential influence of the onshore substation / National Grid substation	Preliminary Assessment	
				screening by intervening woodland.		
8	B1121 Saxmundham Road, north of Friston <b>(Figure 29.20)</b>	640477 260862	0.76	0.77	The onshore substation and National Grid substation likely to be highly visible.	Potential for significant effects that require further assessment.
9	B1121 Aldeburgh Road, south of Friston <b>(Figure 29.21)</b>	641464 259905	1.05	1.25	The onshore substation and National Grid substation likely to be partially visible.	Potential for significant effects that require further assessment.
10	B1119 Saxmundham Road <b>(Figure 29.22)</b>	641095 262490	1.31	1.10	The onshore substation and National Grid substation likely to be partially visible.	Potential for significant effects that require further assessment.
11	Knodishall Hall <b>(Figure 29.23)</b>	642535 261903	1.36	1.21	Likely to be limited/no visibility of the onshore substation and National Grid substation due to extensive screening by intervening woodland.	No potential for significant effects - scoped out of further assessment.
12	Knodishall Common <b>(Figure 29.24)</b>	642952 260979	1.49	1.52	Likely to be limited/no visibility of the onshore substation and National Grid substation due to extensive screening by intervening woodland.	No potential for significant effects - scoped out of further assessment.
13	B1069 Snape Road <b>(Figure 29.25)</b>	642372 259880	1.50	1.68	Likely to be limited/no visibility of the onshore substation and National Grid substation due to extensive	No potential for significant effects - scoped out of further assessment.

Viewpoint	Grid Reference	Distance from the onshore substation (km)	Distance from the National Grid substation (km)	Potential influence of the onshore substation / National Grid substation	Preliminary Assessment	
				screening by intervening woodland.		
14	Grove Road <i>(Figure 29.26)</i>	641619 261025	0.15	0.33	The onshore substation and National Grid substation likely to be highly visible.	Potential for significant effects that require further assessment.
<b>Illustrative viewpoints</b>						
Illustrative viewpoints demonstrate wider views or specific issues; baseline view panoramas are produced, but written analysis of the impacts not required for LVIA.						
A	Aldringham Court <i>(Figure 29.27)</i>	644564 260581	3.13	3.18	Likely to be no visibility of the onshore substation and National Grid substation due to extensive screening by intervening woodland.	No potential for significant effects of onshore substation and National Grid substation. Viewpoint included for consideration of onshore cable route impacts on woodland north of Fitches Lane, in the setting of Aldringham Court.
B	Watch Walk Whin, PRow near Coldfair Green <i>(Figure 29.28)</i>	642614 260605	1.23	1.33	ZTV indicates low/negligible visibility of the onshore substation/National Grid substation, which will be screened behind Grove Wood, with no potential for significant visual effects to arise.	No potential for significant effects - scoped out of further assessment.
C	Sandlings Walk, South of the Old School <i>(Figure 29.29)</i>	642515 261097	1.05	1.06	ZTV indicates low/negligible visibility of the onshore substation/National Grid substation, which will be screened due the immediate	No potential for significant effects - scoped out of further assessment.

Viewpoint	Grid Reference	Distance from the onshore substation (km)	Distance from the National Grid substation (km)	Potential influence of the onshore substation / National Grid substation	Preliminary Assessment	
				hedgerow in the foreground and Grove Wood beyond this, with no potential for significant visual effects to arise.		
D	Saxmundham Road B1119, Junction with PRoW <b>(Figure 29.30)</b>	642031 262769	1.64	1.48	ZTV indicates low visibility of the onshore substation/National Grid substation, which will be screened behind intervening covert woodlands. Overhead line realignments likely to be visible, resulting in relatively low change to existing view of overhead line, with no potential for significant visual effects to arise.	No potential for significant effects - scoped out of further assessment.
E	Sloe Lane, Sandlings Walk to west of Friston Hall <b>(Figure 29.31)</b>	639871 260043	1.70	1.74	ZTV indicates low/negligible visibility of the onshore substation/National Grid substation, which will be screened behind intervening trees and hedgerows vegetation, with no potential for significant visual effects to arise.	No potential for significant effects - scoped out of further assessment.
F	PRoW to east of Wood Farm, Saxmundham <b>(Figure 29.32)</b>	639803 262527	2.0	1.84	Located in area of higher theoretical visibility on ZTV, however is located nearly 2km from the onshore substation and the view towards the substation site is substantially screened by	No potential for significant effects - scoped out of further assessment.

Viewpoint	Grid Reference	Distance from the onshore substation (km)	Distance from the National Grid substation (km)	Potential influence of the onshore substation / National Grid substation	Preliminary Assessment
				intervening trees and hedgerow vegetation. Viewpoint on Sandlings Walk between Friston and Friston Hall included in the Cultural Heritage settings assessment.	

11. A technical assessment of the visual effects of the onshore substation and National Grid substation on Viewpoints 1, 2, 4, 5, 6, 8, 9 and 10 is provided in **section 29.3.1.1**.

#### 29.2.3.1.2 Preliminary Assessment – Settlements

12. A preliminary assessment of the potential visual effects of the onshore substation and National Grid substation on the principal settlement receptors within the study area is presented in **Table A29.2**. Settlements are shown with the ZTV for the onshore substation and National Grid substation in **Figure 29.9** and photomontage visualisations are shown in **Figures 29.13 – 29.25**.

**Table A29.2 Preliminary Assessment of Settlements (onshore substation and National Grid substation)**

Visual receptor	Distance from the onshore substation / National Grid substation	Potential influence of the onshore substation / National Grid substation	Preliminary Assessment
<b>Suffolk</b>			
Aldeburgh	4.8km	None. The onshore substation and National Grid substation will not be visible in views experienced by residents of Aldeburgh.	No potential for significant effects - scoped out of further assessment.
Aldringham	2.9km	Likely to be limited/no visibility of the onshore substation and National Grid substation due to distance and intervening screening by woodland and built development.	No potential for significant effects - scoped out of further assessment.

Visual receptor	Distance from the onshore substation / National Grid substation	Potential influence of the onshore substation / National Grid substation	Preliminary Assessment
Benhall Green	2.8km	Likely to be limited/no visibility of the onshore substation and National Grid substation due to distance and intervening screening by woodland and built development.	No potential for significant effects - scoped out of further assessment.
Coldfair Green (refer to Viewpoint 11)	1.6km	Likely to be limited/no visibility of the onshore substation and National Grid substation due to distance and intervening screening by woodland and built development.	No potential for significant effects - scoped out of further assessment.
Friston (refer to Viewpoints 1, 2, 4, 6 and 9)	250m (to closest dwelling) 420m to Church Road	The onshore substation and National Grid substation likely to be visible.	Potential for significant effects that require further assessment.
Leiston	2.4km	Likely to be limited/no visibility of the onshore substation and National Grid substation due to distance and intervening screening by woodland and built development.	No potential for significant effects - scoped out of further assessment.
Knodishall (refer to Viewpoint 11)	1.2km	None. The onshore substation and National Grid substation will not be visible in views experienced by residents of Knodishall.	No potential for significant effects - scoped out of further assessment.
Saxmundham	2.5km	None. The onshore substation and National Grid substation will not be visible in views experienced by residents of Saxmundham.	No potential for significant effects - scoped out of further assessment.
Sizewell	6.0km	None. The onshore substation and National Grid substation will not be visible in views experienced by residents of Sizewell.	No potential for significant effects - scoped out of further assessment.
Snape	2.8km	None. The onshore substation and National Grid substation will not be visible in views experienced by residents of Snape.	No potential for significant effects - scoped out of further assessment.

Visual receptor	Distance from the onshore substation / National Grid substation	Potential influence of the onshore substation / National Grid substation	Preliminary Assessment
Thorpeness	5.2km	None. The onshore substation and National Grid substation will not be visible in views experienced by residents of Thorpeness.	No potential for significant effects - scoped out of further assessment.

13. A technical assessment of the visual effects of the onshore substation and National Grid substation on residents of the settlement of Friston is provided in **section 29.3**.

#### 29.2.3.1.3 Preliminary Assessment – Transport Routes

14. A preliminary assessment of the potential visual effects of the onshore substation and National Grid substation on the transport routes within the study area is presented in **Table A29.3**. Transport routes are shown with the ZTV for the onshore substation and National Grid substation in **Figure 29.9**.

**Table A29.3 Preliminary Assessment of Transport Routes (onshore substation and National Grid substation)**

Visual receptor	Distance from the onshore substation / National Grid substation	Potential influence of the onshore substation / National Grid substation	Preliminary Assessment
<b>Suffolk</b>			
A12	3.3km	Theoretical visibility over 850m stretch of A12 south of Saxmundham at relatively long distance, such that scale of any potential changes are likely to be of low magnitude.	No potential for significant effects - scoped out of further assessment.
A1094 Aldeburgh / Farnham Road	1.6km	Intermittent theoretical visibility over 2.2km stretch of A1094 between Church Common and Friston (B1121, such that scale of any potential changes are likely to be of low magnitude.	No potential for significant effects - scoped out of further assessment.
B1069 Snape Road (refer to Viewpoint 13)	1.5km	Limited/no theoretical visibility from B1069 due to intervening screening by Grove Wood.	No potential for significant effects - scoped out of further assessment.



Visual receptor	Distance from the onshore substation / National Grid substation	Potential influence of the onshore substation / National Grid substation	Preliminary Assessment
B1119 Saxmundham Road (refer to Viewpoint 10)	1.1km	Intermittent theoretical visibility over 4.5km stretch of B1119 between Saxmundham and Leiston, such that scale of any potential changes are likely to be of low magnitude.	No potential for significant effects - scoped out of further assessment.
B1121 Aldeburgh / Saxmundham Road (refer to Viewpoints 6, 8 and 9)	480m	Intermittent theoretical visibility over 2.3km stretch of B1121 between A1094, Friston and Sternfield with substantial intervening screening by woodland and built development.	Potential for significant effects that require further assessment.
B1122 Aldeburgh Road	2.9 km	Likely to be limited/no visibility of the onshore substation and National Grid substation due to distance and intervening screening by woodland and built development.	No potential for significant effects - scoped out of further assessment.
B1353 Thorpeness Road	2.1km	Likely to be limited/no visibility of the onshore substation and National Grid substation due to distance and intervening screening by woodland and built development.	No potential for significant effects - scoped out of further assessment.
Grove Road (refer to Viewpoints 3 and 4)	130m	Potential for high visibility of the onshore substation and National Grid substation between Friston (Viewpoint 4) and School Road junction (Viewpoint 3).	Potential for significant effects that require further assessment.
Lowestoft to Ipswich rail line	3.2km	Likely to be limited/no visibility of the onshore substation and National Grid substation due to distance and intervening screening by woodland and built development.	No potential for significant effects - scoped out of further assessment.

15. A technical assessment of the visual effects of the onshore substation and National Grid substation on motorists travelling on the B1121 and Grove Road is provided in **section 29.3**

29.2.3.1.4 Preliminary Assessment – Recreational Routes

16. A preliminary assessment of the potential visual effects of the onshore substation and National Grid substation on the main recreational routes within the study area is presented in **Table A29.4**. Recreational routes are shown with the ZTV for the onshore substation and National Grid substation in **Figure 29.9**.

**Table A29.4 Preliminary Assessment of Recreational Routes (onshore substation and National Grid substation)**

Visual receptor	Distance from the onshore substation / National Grid substation	Potential influence of the onshore substation / National Grid substation	Preliminary Assessment
<b>Suffolk</b>			
Suffolk Coastal Path	2.8km	Likely to be limited/no visibility of the onshore substation and National Grid substation due to distance and intervening screening by woodland and built development.	No potential for significant effects - scoped out of further assessment.
Sandlings Walk (refer to Viewpoint 7)	630m	Potential for visibility of the onshore substation and National Grid substation between Friston and Knodishall (to the east) and between Friston and A1094 (Farnham Road) (to the west).	Potential for significant effects that require further assessment.
Suffolk Coastal Cycle Route (Regional Route 42) (refer to Viewpoints 3, 4 and 11)	130m	Potential for high visibility of the onshore substation and National Grid substation from section of route along Grove Road between Friston (Viewpoint 4) and School Road junction (Viewpoint 3).	Potential for significant effects that require further assessment.

17. A technical assessment of the visual effects of the onshore substation and National Grid substation on people walking on the Sandlings Walk and cycling on the Suffolk Coastal Cycle Route (Regional Route 42) is provided in **section 29.3.1.1.4**.

29.2.3.2 Onshore cable route

29.2.3.2.1 Preliminary Assessment – Settlements

18. A preliminary assessment of the potential visual effects of the onshore cable route on the principal settlement receptors within the study area is presented in **Table A29.5**.

**Table A29.5 Preliminary Assessment of Settlements (onshore cable route)**

Visual receptor	Distance from onshore cable route	Potential influence of the onshore cable route	Preliminary Assessment
<b>Suffolk</b>			
Aldeburgh	2.5km	None. The onshore cable route construction will not be visible in views experienced by residents of Aldeburgh.	No potential for significant effects - scoped out of further assessment.
Aldringham	Onshore cable route passes edge of settlement	Potential for visual impact during construction of onshore cable route, which passes to the immediate east and south of Aldringham, crossing the Aldeburgh Road (B1122) at woodland north of Fitches Lane/Aldringham Court.	Potential for significant effects that require further assessment.
Benhall Green	2.7km	None. The onshore cable route construction will not be visible in views experienced by residents of Benhall Green.	No potential for significant effects - scoped out of further assessment.
Coldfair Green	Onshore cable route passes edge of settlement	Potential for visual impact during construction of onshore cable route, which passes to the immediate south and west of Coldfair Green.	Potential for significant effects that require further assessment.
Friston	Onshore cable route passes edge of settlement	Potential for visual impact during construction of onshore cable route, which passes to the immediate north and north-east of Friston.	Potential for significant effects that require further assessment.
Leiston	Onshore cable route passes edge of settlement	Potential for visual impact during construction of onshore cable route, which passes to the immediate south-east of Leiston.	Potential for significant effects that require further assessment.
Knodishall	942m	Limited potential for visual impact during construction of onshore cable route due to extent of vegetative screening within and around dwellings, which screen views of the onshore cable route passing to the south of Knodishall and due to the location of the existing overhead transmission line.	No potential for significant effects - scoped out of further assessment.
Saxmundham	3.4km	None. The onshore cable route construction will not be	No potential for significant effects - scoped out of further assessment.

Visual receptor	Distance from onshore cable route	Potential influence of the onshore cable route	Preliminary Assessment
		visible in views experienced by residents of Saxmundham.	
Sizewell	475m	None. The onshore cable route construction will not be visible in views experienced by residents of Sizewell.	No potential for significant effects - scoped out of further assessment.
Snape	2.6km	None. The onshore cable route construction will not be visible in views experienced by residents of Snape.	No potential for significant effects - scoped out of further assessment.
Thorpeness	730m	None. The onshore cable route construction will not be visible in views experienced by residents of Thorpeness.	No potential for significant effects - scoped out of further assessment.

19. A technical assessment of the visual effects of the construction of the onshore cable route on the residents of Aldringham, Coldfair Green, Friston, Leiston and Knodishall is provided in **section 29.3.2.1.1**.

#### 29.2.3.2.2 Preliminary Assessment –Transport Routes

20. A preliminary assessment of the potential visual effects of the onshore cable route on the transport routes within the study area is presented in **Table A29.6**.

**Table A29.6 Preliminary Assessment of Transport Routes (onshore cable route)**

Visual receptor	Distance from onshore cable route	Potential influence of the onshore cable route	Preliminary Assessment
<b>Suffolk</b>			
A12	3.6km	None. The onshore cable route construction will not be visible in views experienced by motorists travelling on the A12.	No potential for significant effects - scoped out of further assessment.
A1094 Aldeburgh / Farnham Road	1.2km	Likely to be limited visibility of the onshore cable route construction due to distance and intervening screening by woodland and built development.	No potential for significant effects - scoped out of further assessment.
B1069 Snape Road	Onshore cable route crosses road	Likely to be visibility of the onshore cable route construction where it crosses the B1069 to the south of Coldfair Green.	Potential for significant effects that require further assessment.

Visual receptor	Distance from onshore cable route	Potential influence of the onshore cable route	Preliminary Assessment
B1119 Saxmundham Road	1.8km	Likely to be limited visibility of the onshore cable route construction due to distance and intervening screening by woodland and built development.	No potential for significant effects - scoped out of further assessment.
B1121 Aldeburgh / Saxmundham Road	480m	Likely to be visibility of the onshore cable route construction in views from B1121 to the immediate south and north of Friston, where the B1121 runs parallel to the onshore cable route.	Potential for significant effects that require further assessment.
B1122 Aldeburgh Road	Onshore cable route crosses road	Likely to be visibility of the onshore cable route construction where it crosses the B1122 to the south of Aldringham and the physical changes resulting from felling of a small section of woodland north of Fitches Lane/Aldringham Court adjacent to the road.	Potential for significant effects that require further assessment.
B1353 Thorpeness Road	Onshore cable route crosses road	Likely to be visibility of the onshore cable route construction where it crosses the B1353 between Aldringham and Thorpeness.	Potential for significant effects that require further assessment.
Lowestoft to Ipswich rail line	3.4km	None. The onshore cable route construction will not be visible in views experienced by passengers travelling on the Lowestoft to Ipswich line.	No potential for significant effects - scoped out of further assessment.

21. A technical assessment of the visual effects of the construction of the onshore cable route on motorists travelling on the B1069, B1121, B1122 and B1353 is provided in **section 29.3.2.1.2**.

#### 29.2.3.2.3 Preliminary Assessment – Recreational Routes

22. A preliminary assessment of the potential visual effects of the onshore cable route on the main recreational routes within the study area is presented in **Table A29.7**.

**Table A29.7 Preliminary Assessment of Recreational Routes (onshore cable route)**

Visual receptor	Distance from onshore cable route	Potential influence of the onshore cable route	Preliminary Assessment
<b>Suffolk</b>			
Suffolk Coastal Path	Onshore cable route crosses recreational route	Likely to be visibility of the onshore cable route construction where it crosses the Suffolk Coastal Path between Thorpeness and Sizewell.	Potential for significant effects that require further assessment.
Sandlings Walk (Viewpoint 7)	Onshore cable route crosses recreational route	Likely to be visibility of the onshore cable route construction where it crosses the Sandlings Walk at two sections, between Thorpeness and Sizewell; and between Coldfair Green and Friston.	Potential for significant effects that require further assessment.
Suffolk Coastal Cycle Route (Regional Route 42) Viewpoints 3, 4 and 11)	Onshore cable route crosses recreational route	Likely to be visibility of the onshore cable route construction where it crosses the Suffolk Coastal Cycle Route at Grove Road.	Potential for significant effects that require further assessment.

23. A technical assessment of the visual effects of the construction of the onshore cable route on people walking on the Suffolk Coastal Path and the Sandlings Walk; and cycling on Suffolk Coastal Route (Regional Route 42) is provided in **section 29.3.2.1.3**.

### 29.2.3.3 Landfall Location

#### 29.2.3.3.1 Preliminary Assessment – Settlements

24. A preliminary assessment of the potential visual effects of the landfall on the principal settlement receptors within the study area is presented in **Table A29.8**.

**Table A29.8 Preliminary Assessment of Settlements (landfall)**

Visual receptor	Distance from landfall	Potential influence of the landfall	Preliminary Assessment
<b>Suffolk</b>			
Aldeburgh	2.7km	None. The construction of the landfall will not be visible in views experienced by residents of Aldeburgh.	No potential for significant effects - scoped out of further assessment.
Aldringham	2.2km	None. The construction of the landfall will not be visible in views experienced by residents of Aldringham.	No potential for significant effects - scoped out of further assessment.
Benhall Green	8.4km	None. The construction of the landfall will not be visible in	No potential for significant effects - scoped out of further assessment.

Visual receptor	Distance from landfall	Potential influence of the landfall	Preliminary Assessment
		views experienced by residents of Benhall Green.	
Coldfair Green	2.9km	None. The construction of the landfall will not be visible in views experienced by residents of Coldfair Green.	No potential for significant effects - scoped out of further assessment.
Friston	5.4km	None. The construction of the landfall will not be visible in views experienced by residents of Friston.	No potential for significant effects - scoped out of further assessment.
Leiston	2.3km	None. The construction of the landfall will not be visible in views experienced by residents of Leiston.	No potential for significant effects - scoped out of further assessment.
Knodishall	4.4km	None. The construction of the landfall will not be visible in views experienced by residents of Knodishall.	No potential for significant effects - scoped out of further assessment.
Saxmundham	8.0km	None. The construction of the landfall will not be visible in views experienced by residents of Saxmundham.	No potential for significant effects - scoped out of further assessment.
Sizewell	1.7km	None. The construction of the landfall will not be visible in views experienced by residents of Sizewell.	No potential for significant effects - scoped out of further assessment.
Snape	7.4km	None. The construction of the landfall will not be visible in views experienced by residents of Snape.	No potential for significant effects - scoped out of further assessment.
Thorpeness	Landfall is located to the north of settlement	Potential for visual impact during construction of landfall, which is located to the north of Thorpeness.	Potential for significant effects that require further assessment.

25. A technical assessment of the visual effects of the construction of the landfall on residents of Thorpeness is provided in **section 29.3.2.2.1**.

#### 29.2.3.3.2 Preliminary Assessment –Transport Routes

26. A preliminary assessment of the potential visual effects of the landfall on the transport routes within the study area is presented in **Table A29.9**.

**Table A29.9 Preliminary Assessment of Transport Routes (landfall)**

Visual receptor	Distance from landfall	Potential influence of the landfall	Preliminary Assessment
<b>Suffolk</b>			
A12	9.0km	None. The construction of the landfall will not be visible in views experienced by	No potential for significant effects - scoped out of further assessment.

Visual receptor	Distance from landfall	Potential influence of the landfall	Preliminary Assessment
		motorists travelling on the A12.	
A1094 Aldeburgh / Farnham Road	3.4km	None. The construction of the landfall will not be visible in views experienced by motorists travelling on the A1094.	No potential for significant effects - scoped out of further assessment.
B1069 Snape Road	3.1km	None. The construction of the landfall will not be visible in views experienced by motorists travelling on the B1069.	No potential for significant effects - scoped out of further assessment.
B1119 Saxmundham Road	3.3km	None. The construction of the landfall will not be visible in views experienced by motorists travelling on the B1119.	No potential for significant effects - scoped out of further assessment.
B1121 Aldeburgh / Saxmundham Road	5.2km	None. The construction of the landfall will not be visible in views experienced by motorists travelling on the B1121.	No potential for significant effects - scoped out of further assessment.
B1122 Aldeburgh Road	2.3km	None. The construction of the landfall will not be visible in views experienced by motorists travelling on the B1122.	No potential for significant effects - scoped out of further assessment.
B1353 Thorpeness Road	Landfall is located to the north of the road	Likely to be visibility of the construction of the landfall to the north of the road near Thorpeness.	Potential for significant effects that require further assessment.
Lowestoft to Ipswich rail line	8.6km	None. The construction of the landfall will not be visible in views experienced by passengers travelling on the Lowestoft to Ipswich line.	No potential for significant effects - scoped out of further assessment.

27. A technical assessment of the visual effects of the construction of the landfall on motorists travelling on the B1353 is provided in **section 29.3.2.2.2**.

#### 29.2.3.3 Preliminary Assessment – Recreational Routes

28. A preliminary assessment of the potential visual effects of the landfall on the main recreational routes within the study area is presented in **Table A29.10**.



**Table A29.10 Preliminary Assessment of Recreational Routes (landfall)**

Visual receptor	Distance from landfall	Potential influence of the landfall	Preliminary Assessment
<b>Suffolk</b>			
Suffolk Coastal Path	Recreational route crosses landfall	Likely to be visibility of the construction of the landfall where the Suffolk Coastal Path passes the landfall between Thorpeness and Sizewell.	Potential for significant effects that require further assessment.
Sandlings Walk (Viewpoint 7)	400m	Likely to be visibility of the construction of the landfall where the Sandlings Walk is located in close proximity to the north of the landfall, between Thorpeness and Sizewell.	Potential for significant effects that require further assessment.
Suffolk Coastal Cycle Route (Regional Route 42) Viewpoints 3, 4 and 11)	4.5km	None. The construction of the landfall will not be visible in views experienced by cyclists on the Suffolk Coastal Cycle Route.	No potential for significant effects - scoped out of further assessment.

29. A technical assessment of the visual effects of the construction of the landfall on people walking on the Suffolk Coastal Path and the Sandlings Walk is provided in **section 29.3.2.2.3**.

## 29.3 Technical Assessment

### 29.3.1 Potential Impacts during Construction and Operation

30. A detailed technical assessment of the visual effects of the proposed East Anglia ONE North project onshore infrastructure is set out in this technical assessment section of this appendix. This describes, in full technical detail, the likely significant effects of the East Anglia ONE North project onshore infrastructure on each visual receptor and viewpoint, assessing those that were identified in the preliminary assessment in **section 29.2** as having potential to be significantly affected. The technical assessment which follows in **sections 29.3.1.1 to 29.3.2.2.3**, considers the visual effects of each of the onshore substation and National Grid substation, onshore cable route and landfall.

#### 29.3.1.1 Onshore Substation and National Grid Substation

31. An assessment of the visual effects of the onshore substation and National Grid substation from agreed representative viewpoints (**Figure 29.4**) within the study area is presented in the following technical assessment.

29.3.1.1.1 Viewpoint Assessment

**Viewpoint 1 Public Right of Way near Friston House**

Viewpoint 1 Public Right of Way near Friston House				
Designations:	None	Grid reference:	E: 641169	N: 260794
LCT:	Estate Sandlands (7)	View direction:	26°	
		Distance to the onshore substation:	0.21km	
Receptors:	Viewpoint is representative of views experienced by people walking on the PRow along the eastern boundary of the grounds of Friston House and residents of dwellings on lane extending to Woodside Farm.			
Baseline description (existing view is shown in <b>Figure 29.13a</b> ):				
<ul style="list-style-type: none"> <li>Open view across medium to large scale, arable agricultural fields, enclosed by hedgerows and scattered hedgerow trees, in a regular pattern with straight boundaries. Clipped hedgerows, regular pattern and arable use of fields create the impression of a well maintained/managed landscape.</li> <li>The landscape is well wooded, with a large stand of ancient, semi-natural woodland at Grove Wood and the adjoining woodland of Laurel Covert forming the backdrop and providing enclosure of the view. Other smaller stands of woodland and thicker areas of hedgerow combine to provide further wooded cover.</li> <li>The landform is a gently undulating plateau, rising gradually to the north.</li> <li>The skyline of the view is traversed by the National Grid high voltage overhead transmission line and double row of electrical pylons, with electrical lines strung across the skyline of the view.</li> <li>The composition of the view is relatively simple, consisting mainly of agricultural fields, woodland and sky, although it is interrupted by the tall vertical pylons behind the wooded backdrop.</li> <li>There is relatively little built development visible, with just Moor Farm (Fristonmoor) forming a focal point on the skyline. Its vernacular building style of dark weatherboard and red-tiled roof are distinctive.</li> </ul>				
Sensitivity to change: <i>Combination of the value of the view and the susceptibility of each visual receptor</i>				
Value:	Medium			
<ul style="list-style-type: none"> <li>The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.</li> <li>It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.</li> <li>The view is incidental to the walk along the PRow, which forms part of a wider loop and network of PRow that are likely to be used by a moderate number of people locally. The rural setting and views from this PRow network are likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character.</li> <li>The view displays traditional rural qualities and some scenic interest arising from the interaction of the arable agricultural fields in the setting of a large areas of semi-natural, ancient woodland, while also being influenced by the high voltage overhead transmission line traversing the skyline.</li> </ul>				
Receptor	Susceptibility to change	Sensitivity to change		
People walking on PRow near Friston House:	Medium-high	Medium-high		
Residents of dwellings on lane to Woodside Farm:	High	High		
Magnitude of change:				
Geographic extent:	Short distance/local extent			
The onshore substation will be visible at short distance and local extent, located at a distance of approximately 0.21km and is located to the north-east of the viewpoint. The National Grid substation is				

Viewpoint 1 Public Right of Way near Friston House	
located 0.35km from the viewpoint. The view of the onshore substation is representative of views from a localised area on the northern edge of Friston near Friston House.	
Magnitude of change (construction):	High (during construction period)
<ul style="list-style-type: none"> <li>• The construction of the onshore substation, National Grid substation, access road and onshore cable route will be visible in close proximity, in the foreground of the view.</li> <li>• The construction of the onshore infrastructure will result in a large-scale change in the view, due to the size, extent and close proximity of the onshore substation, National Grid substation and construction compounds, together with fencing, access road, vehicles, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period, which come closer to the viewpoint than the onshore substation.</li> <li>• During the construction period, the built form of the onshore substation and National Grid substation will take shape during the construction and installation of the substation platforms, GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc). With progress through the construction period, the built forms of the constructed infrastructure will increase the influence of large buildings and infrastructure, such that electrical infrastructure becomes the prevailing feature of the view.</li> <li>• During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons. The installation of sealing end compounds will also be partially visible, allowing the existing 400kV overhead electrical lines to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the National Grid substation.</li> <li>• The temporary diversion of the circuit by temporary masts is also likely to be partially visible from this viewpoint during the construction period.</li> <li>• The construction of the onshore infrastructure will result in some changes in ground profiles within and immediately around the onshore substation and National Grid substation. The construction of the SUDs basin and bunded landform will be visible in the immediate foreground of the view.</li> <li>• Physical loss of hedgerows will be visible in the onshore construction corridor and National Grid substation.</li> <li>• Task and vehicle lighting may be used in the hours of darkness during approved working hours.</li> </ul>	
Magnitude of change (operation, first year of operational phase): <b>(Figure 29.13b)</b>	High
<ul style="list-style-type: none"> <li>• The operational onshore substation, National Grid substation and access road will be visible in close proximity, in the mid-ground of the view, although the National Grid substation will largely be screened by the intervening bunded landform around the SUDs basins which will form the foreground.</li> <li>• The operation of the onshore infrastructure will result in a large-scale change in the view, due to the size, extent and close proximity of the onshore substation, National Grid substation, together with fencing and operation and maintenance (O&amp;M) vehicles during the operational period.</li> <li>• During the operational period, the complex built form of the onshore substation and National Grid substation, including GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc) will be the prevailing feature of the view.</li> <li>• The onshore substation will be viewed in the landscape context of the adjacent high-voltage transmission line. National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of two new pylons and the modification or replacement of another pylon, and the diversion the northern overhead line route, resulting in an overall increase of one additional pylon from the total number of pylons visible on the current route.</li> </ul>	

**Viewpoint 1 Public Right of Way near Friston House**

- The sealing end compounds will also be partially visible, allowing the existing 400kV overhead electrical conductors (wires) to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the National Grid substation.
- The onshore infrastructure will have resulted in some changes in ground profiles within and immediately around the onshore substation and National Grid substation. The bunded landform around the SUDs basin will form the immediate foreground of the view and provides notable screening of the onshore substation and National Grid substation in this view.
- Recently planted woodland trees in tree tubes/guards planted during the construction period will occupy much of the foreground of the view around the bunded landform of the SUDs basin, but will have limited influence as landscape components/screening features until at least 5 years post-planting.
- The onshore substation and National Grid substation will be viewed against the backdrop of semi-natural ancient woodland, which provides some mitigation though its visual containment and its natural appearance, which offsets the technological appearance of the onshore substation.
- Lighting of the onshore substation will be visible at night, but this is assumed to be passive lighting (passive infra-red) and the onshore substation will not be permanently lit at night.
- The magnitude of change resulting from the onshore substation and National Grid substation will reduce when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.

Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.13c</b> )	Negligible
---	------------

- Mitigation woodland planting between the viewpoint and the onshore substation around the bunded landform of the SUDS basin will be located in the immediate foreground of the view and is predicted to entirely screen the view of the onshore substation and National Grid substation. Mitigation woodland planting which will be in the immediate foreground of the view (directly in front of the viewpoint) is shown in the photomontage in **Figure 29.13c**, to provide an illustration of the landscape mitigation planting around the onshore substation site.
- Mitigation planting will reduce the magnitude of change to negligible after approximately 15 years post-construction, when the woodland planting is predicted to have grown to provide screening of the onshore substation and National Grid substation in the view.

**Significance of effect:**

Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
People walking on PRow near Friston House:	Significant, short-term, temporary	Significant, long-term, temporary	Not significant, long-term, permanent
Residents of dwellings on lane to Woodside Farm:	Significant, short-term, temporary	Significant, long-term, temporary	Not significant, long-term, permanent

**Viewpoint 2 Friston, Church Road**

**Viewpoint 2 Friston, Church Road**

Designations:	None	Grid reference:	E: 641319	N: 260543
LCT:	Estate Sandlands (7)	View direction:	6°	
		Distance to the onshore substation:	0.40km	

Viewpoint 2 Friston, Church Road		
Receptors:	Viewpoint is representative of views experienced by people walking on the PRow that leads north out of Friston and to residents of Friston, particularly dwellings along Church Road and the lane that extends north to Woodside Farm.	
Baseline description (existing view is shown in <b>Figure 12.14a</b> ):		
<ul style="list-style-type: none"> <li>• Distinctively rural setting with perceived timeless quality of rural elements, interrupted only by the modern overhead pylons on the skyline. Juxtaposition of strongly rural landscape elements/character in the foreground with the modern influence of energy transmission in the backdrop.</li> <li>• Small scale field pattern of plots on the northern edge of Friston, informally enclosed by post and wire fences, giving way to more formal, regular and well-maintained hedgerow field boundaries.</li> <li>• Large area of semi-natural ancient at Grove Wood, together with the adjoining Laurel Covert woodland, forms the backdrop and encloses the view, creating the impression of a well-wooded landscape, reinforced by scattered, mature, deciduous trees and shelterbelt blocks.</li> <li>• Undulating landform, rising gradually to the north out of Friston, which provides some localised enclosure in the landscape.</li> <li>• The skyline of the view is traversed by the National Grid high voltage overhead transmission line and double row of electrical pylons, with electrical lines strung across the skyline of the view.</li> <li>• There is relatively little built development visible, with dwellings on the edge of Friston and Moor Farm (Fristonmoor) forming a focal point on the skyline. The vernacular building style of dark weatherboard and red-tiled rooves is distinctive.</li> </ul>		
Sensitivity to change: <i>Combination of the value of the view and the susceptibility of each visual receptor</i>		
Value:	Medium	
<ul style="list-style-type: none"> <li>• The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.</li> <li>• It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.</li> <li>• The view is representative of the view experienced by residents on the northern edges of Friston, particularly dwellings along Church Road and the lane that extends north to Woodside Farm. The view is specific to these areas and to a relatively limited number of people, however the rural setting of the view is likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character and setting of their place of residence.</li> <li>• The view displays traditional rural qualities and scenic interest arising from the strongly rural landscape character and setting of the ancient woodland, which provide a timeless quality, interrupted only by their interaction with more recent high voltage overhead transmission line development traversing the skyline.</li> </ul>		
Receptor	Susceptibility change	Sensitivity to change
People walking on the PRow that leads north out of Friston:	Medium-high	Medium-high
Residents of Friston (Church Road area):	High	High
Magnitude of change:		
Geographic extent:	Short distance/local extent	
The onshore substation will be visible at short distance and local extent, located at a distance of approximately 0.40km and is located to the north of the viewpoint. The National Grid substation is located 0.6km from the viewpoint. The view of the onshore substation is representative of views from a localised area on the northern edge of Friston near Church Road.		
Magnitude of change (construction):	High (during construction period)	
<ul style="list-style-type: none"> <li>• The construction of the onshore substation, National Grid substation and access road will be visible in close proximity, in the mid-ground of the view and will be partially screened by layers of</li> </ul>		

**Viewpoint 2 Friston, Church Road**

intervening hedgerows and mature field boundary trees. Construction of the onshore cable route is unlikely to be visible due to the intervening screening by hedgerows.

- Although there is considerable intervening screening, which breaks up the view of the onshore substation, the construction of the onshore substation and National Grid substation will result in a medium-large scale change in the view, due to their size, extent and proximity, together with the additional influence of fencing, the access road, vehicles, accommodation, machinery and cranes needed during the construction period.
- During the construction period, the built form of the onshore substation and National Grid substation will take shape during the construction and installation of the substation platforms, GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc). With progress through the construction period, the built forms of the constructed infrastructure will increase the influence of large buildings and infrastructure, such that electrical infrastructure will become a prominent influence on the view, set behind and partially screened by intervening hedgerows and mature trees.
- During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons. The installation of sealing end compounds will also be partially visible, allowing the existing 400kV overhead electrical lines to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the National Grid substation.
- The temporary diversion of the circuit by temporary masts is also likely to be partially visible from this viewpoint during the construction period.
- Changes in ground profiles within and immediately around the onshore substation and National Grid substation will be difficult to see in the view due to the amount of foreground screening. The construction of the SUDs basin will be visible to the left of the view.
- Task and vehicle lighting may be used in the hours of darkness during approved working hours.

Magnitude of change (operation, first year of operational phase): <b>(Figure 29.14b)</b>	High
---	------

- The operational onshore substation, National Grid substation and access road will be visible in close proximity, in the mid-ground of the view.
- The operation of the onshore infrastructure will result in a high change in the view, due to the size, extent and close proximity of the onshore substation, National Grid substation, together with fencing, access road and operation and maintenance (O&M) vehicles during the operational period.
- During the operational period, the complex built form of the onshore substation and National Grid substation, including GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc) will become a prominent influence on the view, set behind and partially screened by intervening hedgerows and mature trees.
- The onshore substation will be viewed in the landscape context of the adjacent high-voltage transmission line. National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons.
- The sealing end compounds will also be partially visible, allowing the existing 400kV overhead electrical conductors (wires) to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the National Grid substation.
- The onshore infrastructure will have resulted in some changes in ground profiles within and immediately around the onshore substation and National Grid substation, however these changes will be difficult to see in the view due to the amount of foreground screening. The SUDs basin will be visible to the left of the view.

Viewpoint 2 Friston, Church Road			
<ul style="list-style-type: none"> <li>Woodland and hedgerows planted during pre-construction will be present in the view towards the onshore substation (as per the landscape plan in <b>Figure 29.11a-b</b> and <b>Figure 29.12</b>) and help add to the layers of screening between the viewpoint and the onshore substations.</li> <li>The onshore substation and National Grid substation will be viewed behind intervening hedgerows, new woodland planting and against the backdrop of semi-natural ancient woodland, which provides some mitigation though its visual containment and its natural appearance, which offsets the technological appearance of the onshore substation. The built form of the onshore substation and National Grid substation will also be lower in height than this woodland at Grove Wood/Laurel Covert.</li> <li>Lighting of the substations will be visible at times, but this is assumed to be passive lighting (passive infra-red) and the onshore substations will not be permanently lit.</li> <li>The magnitude of change resulting from the onshore substation and National Grid substation will reduce when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.</li> </ul>			
Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.14c</b> )		Medium-high	
<ul style="list-style-type: none"> <li>The operational onshore substation, National Grid substation and access road will be partially visible in the mid-ground of the view, but are increasingly screened by layers of re-instated hedgerows, individual field boundary trees and woodland (as per the landscape plan in <b>Figure 29.11</b>).</li> <li>It will mainly be the upper parts of the taller infrastructure and buildings within the onshore substation that will be visible, beyond and above the intervening woodland and hedgerows, with the lower infrastructure and ground level features entirely screened.</li> <li>The National Grid substation is largely screened behind layers of hedgerows and woodland areas, with just the tops of the gantries visible near the overhead pylons. The sealing end compounds will not be visible in the view.</li> <li>Hedgerows will combine with woodland planting areas to integrate the substations into the landscape, providing both screening and an extension of elements that are characteristic in the local landscape.</li> <li>Although it will result in a more wooded setting to the north of Friston, with the maturing woodland, the open agricultural setting of the village has been retained in the view, with screening achieved through multiple lines of planting, with a mix of blocks, belts, tree lines and reinstated hedges.</li> <li>The onshore substation will be viewed in the landscape context of the adjacent high-voltage transmission line. National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of two new pylons and the modification or replacement of another pylon, and the diversion the northern overhead line route, resulting in an overall increase of one additional pylon from the total number of pylons visible on the current route.</li> </ul>			
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
People walking on the PRow that leads north out of Friston:	Significant, short-term, temporary	Significant, long-term, temporary	Significant, long-term, permanent
Residents of Friston (Church Road area):	Significant, short-term, temporary	Significant, long-term, temporary	Significant, long-term, permanent

## Viewpoint 4 Friston, Grove Road

Viewpoint 4 Friston, Grove Road				
Designations:	None	Grid reference:	E: 641498	N: 260531
LCT:	Estate Sandlands (7)	View direction:	350°	
		Distance to the onshore substation:	0.46km	
Receptors:	Viewpoint is representative of views experienced by residents of Friston, particularly on Grove Road, motorists and cyclists heading north on Grove Road out of Friston and people walking on the PRoW which extends east out of Friston and joins the Sandlings Walk.			
<b>Baseline description (existing view is shown in <i>Figure 29.16</i>):</b>				
<ul style="list-style-type: none"> <li>Open view from the edge of Friston on Grove Road, with the open view extending east across large-scale arable fields.</li> <li>View has a variety of landscape elements, at the juxtaposition between the urban/residential edge of Friston, with the rural character of the adjacent arable fields and setting of the semi-natural ancient woodland at Grove Wood.</li> <li>Grove Road crosses the view, extending north where it becomes contained by hedgerow field boundaries.</li> <li>Maintained gardens, clipped hedgerows, regular pattern and arable use of fields generally creates the impression of a well maintained/managed landscape, however there are elements in poorer condition.</li> <li>The landscape is well wooded, with a large stand of ancient semi-natural woodland at Grove Wood forming the backdrop and providing enclosure of the view north. Other smaller stands of woodland, individual mature trees and thicker areas of hedgerow combine to provide further wooded cover.</li> <li>The landform is a gently undulating plateau, rising only gradually to the north.</li> <li>There are two pylons visible on the skyline of the view, but the majority of the National Grid overhead transmission line is not visible.</li> </ul>				
<b>Sensitivity to change:</b> <i>Combination of the value of the view and the susceptibility of each visual receptor</i>				
Value:	Medium			
<ul style="list-style-type: none"> <li>The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.</li> <li>It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.</li> <li>The view is representative of the view experienced by residents on the northern edges of Friston, particularly dwellings along Grove Road and is incidental to the arrival into Friston on the PRoW and while driving north out of Friston on Grove Road. The view is specific to these areas and to a relatively limited number of people, however the rural setting of the view is likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character and setting of their place of residence.</li> <li>The view displays traditional rural qualities and some scenic interest arising from the interaction of the arable agricultural fields in the setting of a large areas of semi-natural ancient woodland, while also being influenced by the electrical pylons on the skyline and urban edge features.</li> </ul>				
Receptor	Susceptibility to change	to	Sensitivity to change	
Residents of Friston, particularly on Grove Road:	High		High	
Motorists driving north on Grove Road out of Friston:	Medium		Medium	
People walking on the PRoW extending east out of Friston:	Medium-high		Medium-high	



Viewpoint 4 Friston, Grove Road		
Cyclists heading north on Grove Road out of Friston:	Medium-high	Medium-high
Magnitude of change:		
Geographic extent:	Short distance/local extent	
<p>The onshore substation will be visible at short distance and local extent, located at a distance of approximately 0.46km and is located to the north of the viewpoint. The National Grid substation is located 0.67km from the viewpoint. The view of the onshore substation is representative of views from a localised area on the northern edge of Friston near Grove Road.</p>		
Magnitude of change (construction):	Medium (during construction period)	
<ul style="list-style-type: none"> <li>The construction of the onshore substation and National Grid substation will be partially visible in close proximity, in the mid-ground of the view but will be substantially screened by layers of intervening hedgerows and field boundary trees. The onshore cable route construction works will be visible crossing the arable field in the foreground of the view.</li> <li>The construction of the onshore substation, National Grid substation and onshore cable route will result in a medium-large scale change in the view, due to the size, extent and proximity of the onshore cable route construction works, together with the onshore substation and National Grid substation, together with fencing, access roads, vehicles, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period.</li> <li>During the construction period, the built form of the onshore substation and National Grid substation will take shape during the construction and installation of the substation platforms, GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc). With progress through the construction period, the built forms of the constructed infrastructure will increase the influence of large buildings and infrastructure, such that electrical infrastructure will become an apparent influence on the view, behind and partially screened by intervening hedgerows and mature trees.</li> <li>During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons. The installation of sealing end compounds will not be visible due to intervening screening.</li> <li>The construction of the onshore infrastructure will result in some changes in ground profiles within and immediately around the onshore substation and National Grid substation, however these changes will not be seen in the view due to the amount of foreground screening.</li> <li>Task and vehicle lighting may be used in the hours of darkness during approved working hours.</li> </ul>		
Magnitude of change (operation, first year of operational phase): <b>(Figure 29.16b)</b>	Medium	
<ul style="list-style-type: none"> <li>The operational onshore substation and National Grid substation will be partially visible in close proximity, in the mid-ground of the view. The (underground) onshore cable route will have no visual influence post-restoration, therefore the magnitude of change resulting from the onshore infrastructure will reduce.</li> <li>The operation of the onshore infrastructure will result in a medium change in the view, due to level of intervening screening which reduces the visual influence of the onshore substation and National Grid substation in the view.</li> <li>During the operational period, the complex built form of the onshore substation and National Grid substation, including GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc) will become a slightly apparent influence on the view, set behind and notably screened by intervening hedgerows and mature trees.</li> <li>National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing</li> </ul>		

**Viewpoint 4 Friston, Grove Road**

overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons.

- The onshore infrastructure will have resulted in some changes in ground profiles within and immediately around the onshore substation and National Grid substation, however these changes will not be visible in the view due to the amount of foreground screening.
- Woodland and hedgerows planted during construction will be present in the view towards the onshore substation (as per the landscape plan in **Figure 29.11a-b and Figure 29.12**), including in the foreground of the view, but will have limited influence as landscape components/screening features until at least 5 years post-planting.
- The onshore substation and National Grid substation will be viewed behind intervening hedgerows, new woodland planting and against the backdrop of semi-natural ancient woodland, which provides some mitigation through its visual containment and its natural appearance, which offsets the technological appearance of the onshore substation. The built form of the onshore substation and National Grid substation will also be lower in height than this woodland at Grove Wood/Laurel Covert.
- Lighting of the substations will be visible at times, but this is assumed to be passive lighting (passive infra-red) and the onshore substations will not be permanently lit.
- The magnitude of change resulting from the onshore substation and National Grid substation will reduce when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.

Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.16c</b> )	Medium
---	--------

- The operational onshore substation will be partially visible in the mid-ground of the view but is increasingly screened by layers of re-instated hedgerows, individual field boundary trees and woodland (as per the landscape plan in **Figure 29.11a-b and Figure 29.12**). Maturing woodland alongside Grove Road in particular will provide screening of the onshore substation in the view along Grove Road.
- It will mainly be the upper parts of the taller infrastructure and buildings within the onshore substation that will be visible, beyond and above the intervening woodland and hedgerows, with the lower infrastructure and ground level features entirely screened.
- The hedgerow reinstated alongside Grove Road in the immediate foreground will also provide an additional layer of screening in the view, in particular providing further screening of the National Grid substation such that is largely not visible in the view, apart from the tops of the taller gantries.
- National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons.

**Significance of effect:**

Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Residents of Friston, particularly on Grove Road:	Significant, short-term, temporary	Significant, long-term, temporary	Significant, long-term, permanent
Motorists driving north on Grove Road out of Friston:	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
People walking on the PRow extending east out of Friston:	Significant, short-term, temporary	Significant, long-term, temporary	Significant, long-term, permanent

Viewpoint 4 Friston, Grove Road			
Cyclists heading north on Grove Road out of Friston:	Significant, short-term, temporary	Significant, long-term, temporary	Significant, long-term, permanent

### Viewpoint 5 Public Right of Way, near Moor Farm

Viewpoint 5 Public Right of Way, near Moor Farm				
Designations:	None	Grid reference:	E: 640884	N: 261654
LCT:	Ancient Estate Claylands (1)	View direction:	132°	
		Distance to the onshore substation:	0.64km	
Receptors:	Viewpoint is representative of views experienced by people walking on the PRow near Moor Farm (Fristonmoor) and residents of Moor Farm.			
Baseline description (existing view is shown in <b>Figure 29.17a</b> ):				
<ul style="list-style-type: none"> <li>Open view from relatively elevated position on the plateau landform to the north of the onshore substation, which affords open aspect south across arable land, overhead lines and the village of Friston.</li> <li>Although the view is fundamentally rural in character, it is dominated by the National Grid high voltage overhead transmission line and double row of electrical pylons, with electrical lines strung across the view.</li> <li>Telegraph poles also traverse the view and add to the 'wirescape' visible.</li> <li>Large-scale arable agricultural fields with relatively limited enclosure of foreground fields, giving way to field with hedgerow field boundaries in the middle distance that are partially degraded by hedgerow removal to improve agricultural production.</li> <li>Large area of semi-natural, ancient woodland at Grove Wood, together with the adjoining Laurel Covert woodland, forms the backdrop and encloses the view to the south-east. Woodlands at Friston House provide enclosure to Friston village. The combination of these larger woodland blocks with smaller stands of trees and hedgerows creates the impression of a well-wooded landscape.</li> <li>Housing within the village of Friston is visible to the south, with Friston church tower and a small wind turbine providing focal points.</li> </ul>				
Sensitivity to change: <i>Combination of the value of the view and the susceptibility of each visual receptor</i>				
Value:	Medium			
<ul style="list-style-type: none"> <li>The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.</li> <li>It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.</li> <li>The view is incidental to the walk along the PRow, which forms part of a wider loop and network of PRow that are likely to be used by a moderate number of people locally. The rural setting and views from this PRow network and from Moor House (Fristonmoor) are likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character and setting of their place of residence.</li> <li>The view displays some traditional rural qualities and some scenic interest arising from the interaction of the arable agricultural fields, in the setting of a large areas of semi-natural, ancient woodland, while also being strongly influenced by the high voltage overhead transmission line traversing the view.</li> </ul>				
Receptor	Susceptibility to change	to	Sensitivity to change	

Viewpoint 5 Public Right of Way, near Moor Farm		
People walking on the PRow near Moor Farm (Fristonmoor):	Medium-high	Medium-high
Residents of Moor Farm (Fristonmoor):	High	High
Magnitude of change:		
Geographic extent:	Short distance/local extent	
The onshore substation will be visible at short distance and local extent, located at a distance of approximately 0.64km to the south of the viewpoint. The National Grid substation is located 0.47km from the viewpoint. The view of the onshore substation is representative of views from a localised area around Fristonmoor, to the immediate north of the onshore substation.		
Magnitude of change (construction):	High (during construction period)	
<ul style="list-style-type: none"> <li>The construction of the onshore substation, National Grid substation and access road will be visible in close proximity, in the mid-ground of the view. The National Grid substation will be located closest to the viewpoint and will form the most prominent element, to the fore of the East Anglia ONE North onshore substation.</li> <li>The construction of these onshore infrastructure will result in a large-scale change in the view, due to the size, extent and close proximity of the onshore substation, National Grid substation and construction compounds, together with fencing, access road, vehicles, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period.</li> <li>During the construction period, the built form of the onshore substation and National Grid substation will take shape during the construction and installation of the substation platforms, GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc). With progress through the construction period, the built forms of the constructed infrastructure will increase the influence of large buildings and infrastructure, such that electrical infrastructure becomes the prevailing feature of the view.</li> <li>The scale of the onshore substation and National Grid substation is subsumed below the vertical scale of the electrical pylons but is stark in comparison to the smaller scale of the housing and church in Friston.</li> <li>During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons, bringing the National Grid overhead line/pylons closer to viewpoint and appearing larger in scale in the view.</li> <li>The installation of sealing end compounds will also be visible allowing the existing 400kV overhead electrical conductors (wires) to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the National Grid substation.</li> <li>The construction of the onshore infrastructure will result in some changes in ground profiles within and immediately around the onshore substation and National Grid substation. The construction of the SUDs basin will be visible in the right of the view.</li> <li>The physical loss of the single hedgerow within the National Grid substation and the edge of Laurel Covert woodland will be seen in the view during construction.</li> <li>Task and vehicle lighting may be used in the hours of darkness during approved working hours.</li> </ul>		
Magnitude of change (operation, first year of operational phase): <b>(Figure 29.17b)</b>	High	
<ul style="list-style-type: none"> <li>The operational onshore substation, National Grid substation and access road will be visible in close proximity, in the mid-ground of the view.</li> <li>The operation of the onshore infrastructure will result in a large-scale change in the view, due to the size, extent and close proximity of the onshore substation and National Grid substation, together</li> </ul>		

**Viewpoint 5 Public Right of Way, near Moor Farm**

with fencing, access road and operation and maintenance (O&M) vehicles during the operational period.

- During the operational period, the complex built form of the onshore substation and National Grid substation, including GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc) will be the prevailing feature of the view.
- National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons and bringing the National Grid overhead line/pylons closer to the viewpoint and appearing larger in scale in the view.
- The sealing end compounds will also be visible allowing the existing 400kV overhead electrical lines to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the National Grid substation.
- The onshore infrastructure will have resulted in some changes in ground profiles within and immediately around the onshore substation and National Grid substation. The SUDs basin will be visible in the right of the view.
- Woodland and hedgerows planted during pre-construction will be present in the view around the onshore substation (as per the landscape plan in **Figure 29.11a-b** and **Figure 29.12**) and help add to the layers of screening between the viewpoint and the onshore substation/National Grid substation. The PRoW on which the viewpoint is located will be lined by a young hedgerow and individual field boundary trees, as shown in the immediate foreground in **Figure 29.17b**, however there is still likely to be views over the hedgerow to the onshore substation, National Grid substation and National Grid re-alignment works.
- The onshore substation and National Grid substation will be viewed against the backdrop of semi-natural ancient woodland, which provides some mitigation through its visual containment and its natural appearance, which offsets the technological appearance of the onshore substation. The built form of the onshore substation and National Grid substation will also be lower in height than this woodland at Grove Wood/Laurel Covert.
- Lighting of the substations will be visible at times, but this is assumed to be passive lighting (passive infra-red) and the onshore substations will not be permanently lit.
- The magnitude of change resulting from the onshore substation and National Grid substation will reduce when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.

Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.17c</b> )	Medium
---	--------

- The PRoW on which the viewpoint is located will be lined by a mature native hedgerow and individual field boundary trees, as shown in the immediate foreground in **Figure 29.17c**. Provided that this hedgerow is maintained at approximately 2m high, it will provide an effective and immediate screening alongside the PRoW, such that walkers will not be able see directly the view of the onshore substation, and National Grid substation, but may see broken views through the foreground foliage of the hedgerow.
- The National Grid re-alignment works will be visible due to the height and proximity of the pylons and overhead lines to the viewpoint, forming prominent high-voltage transmission line elements at closer proximity and larger in scale in the view.
- The sealing end compounds are unlikely to be visible due to the intervening screening afforded by the immediate hedgerow and the maturing planting around these sealing end compounds.
- Views of the onshore substation and National Grid substation from residents of Fristonmoor are likely to be increasingly screened by layers of re-instated hedgerows, individual field boundary trees and the 'covert' woodland blocks to the south of Fristonmoor (as per the landscape plan in **Figure 29.11a-b** and **Figure 29.12**), with the National Grid re-alignment works forming the most prominent elements in the view.

Viewpoint 5 Public Right of Way, near Moor Farm			
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
People walking on the PRow near Moor Farm (Fristonmoor):	Significant, short-term, temporary	Significant, long-term, temporary	Significant, long-term, permanent
Residents of Moor Farm (Fristonmoor):	Significant, short-term, temporary	Significant, long-term, temporary	Significant, long-term, permanent

### Viewpoint 6 Friston, Village Green

Viewpoint 6 Friston, Village Green				
Designations:	None	Grid reference:	E: 641198	N: 260337
LCT:	Estate Sandlands (7)	View direction:	12°	
		Distance to the onshore substation:	0.62km	
Receptors:	Viewpoint is representative of views experienced by residents of Friston and motorists driving north on the B1121 through the centre of Friston.			
Baseline description (existing view is shown in <b>Figure 29.18a</b> ):				
<ul style="list-style-type: none"> <li>The existing view is defined by the setting of Friston village green, looking across the green to Friston Church, and by the residential housing on Hillcrest which is adjacent to the village green.</li> <li>The view is contained largely within the village of Friston, but does extend beyond to the woodland at Grove Wood.</li> <li>The main focus of the view is Friston Church, its tower rising above the surrounding houses to form a focus in the village skyline.</li> <li>The landscape is well wooded, with a large stand of ancient semi-natural woodland at Grove Wood forming the backdrop to the village and providing enclosure of the view north. Trees within the village provide further visual enclosure to the setting of the village.</li> <li>There are two pylons visible on the skyline of the view, but the majority of the National Grid overhead transmission line is not visible.</li> <li>Saxmundham Road extends to the north and is lined by amenity trees on the edge of the village green.</li> <li>The perception is of a small, tranquil, traditional village set around the village green and church.</li> </ul>				
Sensitivity to change: <i>Combination of the value of the view and the susceptibility of each visual receptor</i>				
Value:	Medium-high			
<ul style="list-style-type: none"> <li>The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.</li> <li>It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.</li> <li>The view is representative of the view experienced by residents in the village of Friston and people using the open space at the village green. The view is specific to these areas and to a relatively limited number of people, however the setting of Friston village in the view is likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character and setting of their place of residence.</li> <li>The view displays traditional rural qualities and scenic interest arising from the village character and setting of the ancient woodland, interrupted only by the presence of some National Grid pylons in the backdrop.</li> </ul>				

Viewpoint 6 Friston, Village Green		
Receptor	Susceptibility to change	Sensitivity to change
Residents of Friston:	High	High
Motorists on B1121 through the centre of Friston:	Medium	Medium-high
Magnitude of change:		
Geographic extent:	Short distance/local extent	
<p>The onshore substation will be visible at short distance and local extent, located at a distance of approximately 0.62km to the south of the viewpoint. The National Grid substation is located 0.81km from the viewpoint. The view of the onshore substation is representative of views from a localised area in the centre of Friston village around the village green.</p>		
Magnitude of change (construction):	Low (during construction period)	
<ul style="list-style-type: none"> <li>The construction of the onshore substation and National Grid substation will largely be screened during the construction period by housing in Friston in the foreground and intervening layers of vegetation/trees. The onshore cable route construction works will not be visible.</li> <li>Only the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible during construction through intervening trees and will only be slightly apparent behind housing in the view.</li> <li>The construction of the onshore substation and National Grid substation will result in a small change in the view, due to the extent of intervening screening and the limited amount of the onshore substation and National Grid substation visible. Lower lying features such as fencing, access roads, vehicles, the stockpiling of subsoil/topsoil and changes in ground profiles and SUDs basins will not be visible in the view.</li> <li>The majority of the National Grid overhead line realignment works will not be visible during the construction period, or the installation of sealing end compounds, due to intervening screening, with the exception of the upper part of one new pylon visible in the backdrop between housing and vegetation.</li> <li>Task and vehicle lighting may be used in the hours of darkness during approved working hours.</li> </ul>		
Magnitude of change (operation, first year of operational phase):	Low	
<p><b>(Figure 29.18b)</b></p> <ul style="list-style-type: none"> <li>The operation of the onshore substation and National Grid substation will largely be screened during the operational period by housing in Friston in the foreground and intervening layers of vegetation/trees.</li> <li>Only the larger electrical infrastructure associated with the onshore substation, such as the harmonic filters, will be visible through intervening trees and will only be slightly apparent behind housing in the view as they are screened by foreground housing and trees.</li> <li>The operation of the onshore substation and National Grid substation will result in a small change in the view, due to the extent of intervening screening and the limited amount of the onshore substation and National Grid substation visible. Lower lying features such as fencing, access roads, O&amp;M vehicles and changes in ground profiles and SUDs basins will not be visible in the view.</li> <li>The majority of the National Grid overhead line realignment works will not be visible during the operational period, or the sealing end compounds, due to intervening screening, with the exception of the upper part of one new pylon visible in the backdrop between housing and vegetation.</li> <li>Woodland and hedgerows planted during construction will not be visible in the view until they are well established/mature.</li> <li>The onshore substation and National Grid substation will be viewed against the backdrop of semi-natural ancient woodland, which provides some mitigation through its visual containment and its natural appearance, which offsets the technological appearance of the onshore substation. The</li> </ul>		

Viewpoint 6 Friston, Village Green			
<p>built form of the onshore substation and National Grid substation will also be lower in height than this woodland at Grove Wood/Laurel Covert.</p> <ul style="list-style-type: none"> <li>Lighting of the substations will be visible at times, but this is assumed to be passive lighting (passive infra-red) and the onshore substations will not be permanently lit.</li> <li>The magnitude of change resulting from the onshore substation and National Grid substation will reduce when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.</li> </ul>			
Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.18c</b> )		Low	
<ul style="list-style-type: none"> <li>Mitigation woodland planting and individual tree planting along the intervening field boundaries to the north of Friston, is predicted to have grown to provide some further screening of the components of the onshore substation in the view, however the magnitude of change remains low after approximately 15 years post construction, due to the partial visibility of the upper parts of some of the taller infrastructure in the view.</li> </ul>			
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Residents of Friston:	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Motorists on B1121 through the centre of Friston:	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent

### Viewpoint 8 B1121 Saxmundham Road, north of Friston

Viewpoint 8 B1121 Saxmundham Road, north of Friston				
Designations:	None	Grid reference:	E: 640477	N: 260862
LCT:	Estate Sandlands (7)	View direction:	60°	
		Distance to the onshore substation:	0.76km	
Receptors:	Viewpoint is representative of views experienced by motorists driving on the B1121 Saxmundham Road and residents of Moor Farm.			
Baseline description (existing view is shown in <b>Figure 29.20a</b> ):				
<ul style="list-style-type: none"> <li>Although the view is fundamentally rural in character, it is dominated by the National Grid high voltage overhead transmission line and double row of electrical pylons, with electrical lines extending into the distance in the view. The large scale and visual complexity of these features is stark compared to the generally small scale elements of the rural landscape in the view.</li> <li>The view is relatively open, across medium to large scale arable agricultural fields, enclosed by hedgerows and scattered hedgerow trees, in a regular pattern with straight boundaries. Clipped hedgerows, regular pattern and arable use of fields create the impression of a well maintained/managed landscape, although there has been visible hedgerow loss through agricultural intensification.</li> <li>The landscape is well wooded, with a large stand of ancient semi-natural woodland at Grove Wood and the adjoining woodland of Laurel Covert forming the backdrop and providing enclosure of the view. Other smaller stands of woodland and thicker areas of hedgerow combine to provide further wooded cover.</li> <li>The landform is a gently undulating plateau, rising gradually to the north and east.</li> </ul>				



Viewpoint 8 B1121 Saxmundham Road, north of Friston		
<ul style="list-style-type: none"> <li>The inherent characteristics are relatively simple, consisting mainly agricultural fields, woodland and sky, although the view is made more complex by the tall vertical pylons and transmission lines.</li> <li>There is relatively little built development visible, with just Moor Farm (Fristonmoor) being just about visible behind trees on the skyline.</li> </ul>		
Sensitivity to change: <i>Combination of the value of the view and the susceptibility of each visual receptor</i>		
Value:	Medium-low	
<ul style="list-style-type: none"> <li>The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.</li> <li>It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.</li> <li>The view is incidental to the drive along the B1121 Saxmundham Road, which connects Friston with Saxmundham and is likely to be used by a large number of people locally.</li> <li>The rural setting and views from this road are likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character in the backdrop to the travel between Friston and Saxmundham, although the scenic quality is reduced by the pylons and large scale fields.</li> <li>The view displays traditional rural qualities and some scenic interest arising from the interaction of the arable agricultural fields in the setting of a large areas of semi-natural ancient woodland but is dominated by the influenced of the large scale pylons and high voltage overhead transmission line.</li> </ul>		
Receptor	Susceptibility to change	Sensitivity to change
Motorists driving on the B1121 Saxmundham Road:	Medium	Medium
Residents of Moor Farm:	High	High
Magnitude of change:		
Geographic extent:	Short distance/local extent	
The onshore substation will be visible at short distance and local extent, located at a distance of approximately 0.76km to the east of the viewpoint. The National Grid substation is located 0.77km from the viewpoint. The view of the onshore substation is representative of views from a localised area in the centre of Friston village around the village green.		
Magnitude of change (construction):	Medium-high (during construction period)	
<ul style="list-style-type: none"> <li>The construction of the onshore substation, National Grid substation and access road will be visible in close proximity, in the foreground and midground of the view and will be viewed in the context of the large-scale pylons and high voltage overhead transmission line which dominate the existing view.</li> <li>The scale of the onshore substation and National Grid substation is subsumed below the vertical scale of the electrical pylons and is also contained by larger scale of Grove Wood in the backdrop.</li> <li>The construction of these onshore infrastructure will result in a medium-large scale change in the view, due to the size, extent and close proximity of the onshore substation, National Grid substation and construction compounds, together with fencing, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period.</li> <li>The construction of the access road will be prominent crossing the foreground of the view, passing under the overhead lines. The movement of construction vehicles along the access road to the onshore substation will be visible in the view.</li> <li>During the construction period, the built form of the onshore substation and National Grid substation will take shape during the construction and installation of the substation platforms, GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc). With progress through the construction period, the built forms of the constructed infrastructure will increase the influence of large buildings and infrastructure.</li> </ul>		

**Viewpoint 8 B1121 Saxmundham Road, north of Friston**

- During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons. The installation of sealing end compounds will also be visible allowing the existing 400kV overhead lines to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the to connect the National Grid substation.
- The construction of the onshore infrastructure will result in some changes in ground profiles within and immediately around the onshore substation and National Grid substation.
- The loss of the single hedgerow within the National Grid substation will be seen during construction.
- Task and vehicle lighting may be used in the hours of darkness during approved working hours.

Magnitude of change (operation, first year of operational phase):	Medium-high
---	-------------

(**Figure 29.20b**)

- The operational onshore substation, National Grid substation and access road will be visible in close proximity, in the mid-ground of the view.
- Electrical transmission infrastructure is substantially characteristic in the existing view and will remain the prevailing feature of the view. The addition of the onshore substation and National Grid substation adds features that are substantially characteristic in the existing view and therefore represent a relatively lower change than in other views, where the overhead transmission line has less influence in the baseline.
- The operation of the onshore infrastructure will result in a medium scale change in the view, due to the size, extent and proximity of the onshore substation and National Grid substation, together with fencing, access road and operation and maintenance (O&M) vehicles during the operational period.
- During the operational period, the complex built form of the onshore substation and National Grid substation, including GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc) will be readily apparent features of the view, but seen in the context of the large scale overhead transmission line and pylons.
- National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons.
- The sealing end compounds will also be visible allowing the existing 400kV overhead lines to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the to connect the National Grid substation.
- The access road will be visible crossing the foreground of the view, passing under the overhead lines. The movement of O&M vehicles along the access road to the onshore substation will be visible in the view.
- The onshore infrastructure will have resulted in some changes in ground profiles within and immediately around the onshore substation and National Grid substation.
- Woodland and hedgerows planted during pre-construction and at the end of the construction period will be present in the view around the onshore substation (as per the OLMP in **Figure 29.11a-b** and **Figure 29.12**), but will have limited influence as landscape components/screening features until at least 5 years post-planting.
- The onshore substation and National Grid substation will be viewed against the backdrop of semi-natural ancient woodland, which provides some mitigation though its visual containment and its natural appearance, which offsets the technological appearance of the onshore substation. The built form of the onshore substation and National Grid substation will also be lower in height than this woodland at Grove Wood/Laurel Covert.
- Lighting of the substations will be visible at times, but this is assumed to be passive lighting (passive infra-red) and the onshore substations will not be permanently lit.

Viewpoint 8 B1121 Saxmundham Road, north of Friston			
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the onshore substation and National Grid substation will reduce when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.</li> </ul>			
Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.20c</b> )		Medium	
<p>The operational onshore substation, National Grid substation and access road will be visible in the mid-ground of the view, but are increasingly screened by layers of hedgerows and woodland (as per the OLMP in <b>Figure 29.11a-b</b> and <b>Figure 29.12</b>).</p> <ul style="list-style-type: none"> <li>It will mainly be the upper parts of the taller infrastructure and buildings within the onshore substation that will be visible, beyond and above the intervening woodland and hedgerows, with the lower infrastructure and ground level features largely screened.</li> <li>The National Grid substation will be visible, but behind and at the base of the prominent foreground overhead pylons. The sealing end compounds will also be visible in this context, adjacent to the re-aligned National Grid overhead pylons.</li> <li>A network of hedgerows around the perimeter of the sealing end compounds and National Grid substation will help to integrate these features into the landscape.</li> <li>Electrical transmission infrastructure is substantially characteristic in the existing view and will remain the prevailing feature of the view. The addition of the onshore substation and National Grid substation adds features that are substantially characteristic in the existing view and therefore represent a relatively lower change than in other views, where the overhead transmission line has less influence in the baseline.</li> <li>National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons.</li> </ul>			
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Motorists driving on the B1121 Saxmundham Road:	Significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Residents of Moor Farm:	Significant, short-term, temporary	Significant, long-term, temporary	Significant, long-term, permanent

### Viewpoint 9 B1121 Aldeburgh Road, south of Friston

Viewpoint 9 B1121 Aldeburgh Road, south of Friston				
Designations:	None	Grid reference:	E: 641464	N: 259905
LCT:	Estate Sandlands (7)	View direction:	357°	
		Distance to the onshore substation:	1.05km	
Receptors:	Viewpoint is representative of views experienced by motorists approaching Friston on the B1121 Aldeburgh Road and residents of southern part of Friston, particularly dwellings along Aldeburgh Road.			
Baseline description (existing view is shown in <b>Figure 29.21a</b> ):				

**Viewpoint 9 B1121 Aldeburgh Road, south of Friston**

- Open view from the edge of Friston on Aldeburgh Road, with the open view extending east across large-scale, arable fields and north to take in the village of Friston.
- View has a variety of landscape elements, at the juxtaposition between the urban/residential edge of Friston, with the rural character of the adjacent arable fields and the setting of the semi-natural ancient woodland at Grove Wood.
- The existing view is defined by the setting of Friston village, taking in housing on Aldeburgh Road and Grove Road, and Friston Church, which forms the focal point in the view.
- Aldeburgh Road crosses the view, extending north where it is contained by hedgerow field boundaries.
- Maintained gardens, clipped hedgerows, regular pattern and arable use of fields create the impression of a well maintained/managed landscape, although large field sizes indicate that hedgerows may have been removed for agricultural intensification and there are detractors such as pylons in the backdrop.
- The landscape is well wooded, with a large stand of ancient semi-natural woodland at Grove Wood forming the backdrop to the village and providing enclosure of the view north. Trees within the village provide further visual enclosure to the setting of the village.
- The skyline backdrop to the village of Friston in the view is traversed by the National Grid high voltage overhead transmission line and double row of electrical pylons, with electrical lines strung across the skyline behind the housing and church in Friston, and passing behind Grove Wood.
- The perception is of a relatively tranquil, traditional rural village setting whose backdrop has been influenced by modern, large-scale energy transmission infrastructure.

**Sensitivity to change:** *Combination of the value of the view and the susceptibility of each visual receptor*

**Value:** Medium

- The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.
- It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.
- The view is incidental to the drive along the B1121 Aldeburgh Road, arriving into Friston, which connects Friston with Aldeburgh and is likely to be used by a large number of people locally.
- The rural setting and views from this road are likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character in the backdrop to the travel between Friston and Aldeburgh, and to the rural setting of the village of Friston.
- The view displays traditional rural qualities and some scenic interest arising from the interaction of the village and Friston Church, with the surrounding arable landscape and the setting of nearby ancient woodland, but is also influenced by the high voltage overhead transmission line in the village backdrop.

Receptor	Susceptibility to change	Sensitivity to change
Motorists approaching Friston on the B1121 Aldeburgh Road:	Medium	Medium
Residents of southern part of Friston, particularly Aldeburgh Road:	High	High

**Magnitude of change:**

**Geographic extent:** Short distance/local extent

The onshore substation will be visible at short distance and local extent, located at a distance of approximately 1.05km to the north of the viewpoint. The National Grid substation is located 1.25km from the viewpoint. The view of the onshore substation is representative of views from a localised area on the southern edge of Friston village near Aldeburgh Road.

**Magnitude of change (construction):** Medium-low (during construction period)

**Viewpoint 9 B1121 Aldeburgh Road, south of Friston**

- The construction of the onshore substation and National Grid substation will largely be screened during the construction period by housing in Friston in the foreground and intervening layers of vegetation/trees. The onshore cable route construction works will be visible crossing the arable field to the fore of Grove Wood.
- Only the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be partially visible during construction through intervening trees and with the upper parts of the taller infrastructure likely to be t apparent behind housing in Friston in the view creating a somewhat discordant juxtaposition of elements.
- The construction of the onshore substation and National Grid substation will result in a medium-low change in the view, due to the extent of intervening screening and the limited amount of the onshore substation and National Grid substation visible. Lower lying features such as fencing, access roads, vehicles, the stockpiling of subsoil/topsoil and changes in ground profiles and SUDs basins will not be visible.
- During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons. The installation of sealing end compounds will not be visible due to intervening screening.
- Task and vehicle lighting may be used in the hours of darkness during approved working hours.

Magnitude of change (operation, first year of operational phase):	Medium-low
---	------------

**(Figure 29.21b)**

- The operation of the onshore substation and National Grid substation will largely be screened during the operational period by housing in Friston in the foreground and intervening layers of vegetation/trees.
- Only the upper parts of the larger electrical infrastructure associated with the onshore substation, such as harmonic filters and taller GIS room building will be visible through intervening trees and will only be apparent behind housing in the view as they are screened by foreground housing and trees. They may however, introduce elements that draw attention because of their contrast with smaller scale development and focal points (such as Friston Church).
- The operation of the onshore substation and National Grid substation will result in a small/moderate change in the view, due to the extent of intervening screening and the limited amount of the onshore substation and National Grid substation visible. Lower lying features such as fencing, access roads, O&M vehicles and changes in ground profiles and SUDs basins will not be visible in the view, but also due to the onshore infrastructure being viewed in the context of the existing National Grid overhead line, which already forms the backdrop to Friston in the view.
- The realigned National Grid pylon towers will be visible during the operational period, consisting of two new pylons and the modification or replacement of another pylon, and the diversion the northern overhead line route, resulting in an overall increase of one additional pylon from the total number of pylons visible on the current route, however the sealing end compounds will not be visible due to intervening screening.
- Woodland and hedgerows planted during construction will not be visible in the view due to the intervening buildings and housing in Friston.
- The onshore substation and National Grid substation will be viewed against the backdrop of semi-natural ancient woodland, which provides some mitigation though its visual containment and its natural appearance, which offsets the technological appearance of the onshore substation. The built form of the onshore substation and National Grid substation will also be lower in height than this woodland at Grove Wood/Laurel Covert.
- Lighting of the substations will be visible at times, but this is assumed to be passive lighting (passive infra-red) and the onshore substations will not be permanently lit.

Viewpoint 9 B1121 Aldeburgh Road, south of Friston			
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the onshore substation and National Grid substation will reduce when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.</li> </ul>			
Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.21c</b> )		Medium-low	
<ul style="list-style-type: none"> <li>Mitigation planting will be partially visible in the backdrop to Friston in the view, providing further partial screening of the onshore substation and National Grid substation, however in this view, it is not likely to have grown high enough, after 15 years, to screen the taller elements of the electrical infrastructure, which will remain visible in the backdrop to Friston, such that magnitude of change remains medium-low.</li> </ul>			
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Motorists approaching Friston on the B1121 Aldeburgh Road:	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Residents of southern part of Friston, particularly Aldeburgh Road:	Significant, short-term, temporary	Significant, long-term, temporary	Significant, long-term, permanent

### Viewpoint 10 B1119 Saxmundham Road

Viewpoint 10 B1119 Saxmundham Road				
Designations:	None	Grid reference:	E: 641095	N: 262490
LCT:	Ancient Estate Claylands (1)	View direction:	167°	
		Distance to the onshore substation:	1.3km	
Receptors:	Viewpoint is representative of views experienced by motorists driving on the B1119 Saxmundham Road.			
Baseline description (existing view is shown in <b>Figure 29.22a</b> ):				
<ul style="list-style-type: none"> <li>Open view from the plateau landform to the north of the onshore substation, which affords an aspect south across arable land to the National Grid overhead lines but is relatively contained by the rising landform in the foreground.</li> <li>Large-scale arable agricultural fields, with relatively limited enclosure of foreground fields, giving way to field with hedgerow field boundaries and field boundary trees/shelterbelts around farms in the middle distance.</li> <li>Although the view is fundamentally rural in character, the backdrop is strongly influenced by the National Grid high voltage overhead transmission line and double row of electrical pylons, with electrical lines strung across the view. The field pattern is relatively large-scale created by hedgerow removal.</li> <li>Telegraph poles also traverse the view and add to the 'wirescape' visible.</li> <li>Large area of semi-natural ancient woodland at Grove Wood, together with the adjoining Laurel Covert woodland, forms the backdrop and contains the view to the south-east. The combination of these larger woodland blocks with smaller stands of trees and hedgerows creates the impression of a well-wooded landscape.</li> </ul>				

Viewpoint 10 B1119 Saxmundham Road		
<ul style="list-style-type: none"> <li>Farmsteads at Clouting's Farm and Pattie's Farm are visible on the foreground skyline to the south, providing focal points and are set within farm woods.</li> </ul>		
Sensitivity to change: <i>Combination of the value of the view and the susceptibility of each visual receptor</i>		
Value:	Medium	
<ul style="list-style-type: none"> <li>The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.</li> <li>It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.</li> <li>The view is incidental to the drive along the B1119 Saxmundham Road, which connects Leiston with Saxmundham and is likely to be used by a large number of people locally.</li> <li>The rural setting and views from this road are likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character in the backdrop to the travel between Leiston and Saxmundham.</li> <li>The view displays rural qualities and some scenic interest arising from the interaction of the arable agricultural fields in the setting of a large areas of semi-natural ancient woodland but is also influenced by the large-scale pylons and high voltage overhead transmission lines that extend across the view.</li> </ul>		
Receptor	Susceptibility change	Sensitivity to change
Motorists driving on the B1119 Saxmundham Road:	Medium	Medium
Magnitude of change:		
Geographic extent:	Short distance/local extent	
<p>The onshore substation will be visible at short distance and local extent, located at a distance of approximately 1.3km to the south of the viewpoint. The National Grid substation is located 1.1km from the viewpoint. The view of the onshore substation is representative of views from a localised area on the B1119 Saxmundham Road.</p>		
Magnitude of change (construction):	Low (during construction period)	
<ul style="list-style-type: none"> <li>Some of the taller elements required during the construction of the onshore substation and National Grid substation may be visible in the mid-ground of the view, however they will be largely screened and contained by the rising landform in the foreground and woodland around Clouting's Farm and Little Moor Farm on the skyline, which prevents views of the substation site.</li> <li>The National Grid substation will be located closest to the viewpoint, but the larger height of the elements of the East Anglia ONE North onshore substation will form the more prominent elements, along with the larger machinery and cranes required during construction.</li> <li>The construction of the onshore infrastructure will result in a low scale change in the view, with much of the construction works screened by a combination of the foreground landform and woodland/hedgerows around Clouting's Farm and Little Moor Farm on the skyline.</li> <li>Due to the intervening screening, the fencing, access road, vehicles and the stockpiling of subsoil/topsoil needed during the construction period are unlikely to be visible in the view.</li> <li>The scale of the onshore substation and National Grid substation is subsumed below the vertical scale of the electrical pylons.</li> <li>During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons. The installation of sealing end compounds will also be partially visible to connect the National Grid substation to the existing high-voltage transmission line.</li> <li>Task and vehicle lighting may be used in the hours of darkness during approved working hours.</li> </ul>		
Magnitude of change (operation, first year of operational phase):	Low	

Viewpoint 10 B1119 Saxmundham Road			
<b>(Figure 29.22b)</b>			
<ul style="list-style-type: none"> <li>The operational onshore substation and National Grid substation will not be visible in the view due to the screening by the rising landform in the foreground and woodland around Clouting's Farm and Little Moor Farm on the skyline.</li> <li>The main visible elements will be the realigned National Grid pylon towers, which will be visible, consisting of two new pylons and the modification or replacement of another pylon, and the diversion the northern overhead line route, resulting in an overall increase of one additional pylon from the total number of pylons visible on the current route, bringing the National Grid overhead line/pylons closer and larger in scale in the view.</li> <li>The sealing end compounds will not be visible due to the foreground landform screening and tree cover.</li> <li>Lighting of the substations will be visible at times, but this is assumed to be passive lighting (passive infra-red) and the onshore substations will not be permanently lit.</li> <li>The magnitude of change resulting from the onshore substation and National Grid substation will reduce further when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.</li> </ul>			
Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.22c</b> )		Low	
<ul style="list-style-type: none"> <li>Layers of maturing woodland and hedgerows planted as part of the OLMP (<b>Figure 29.11a-b and Figure 29.12</b>) will be visible in the mid-ground of the view, joining existing stands of woodland on the mid-ground skyline and will further reduce the amount of the onshore substation and National Grid substation visible in the view.</li> <li>Mitigation planting will reduce the magnitude of change to low after 15 years when the woodland planting is predicted to have grown to provide substantial screening of the onshore substation and National Grid substation in the view, softening its appearance and integrating it into the well wooded landscape context.</li> <li>The realigned National Grid pylon towers will be the most visible elements in the view, consisting of two new pylons and the modification or replacement of another pylon, and the diversion the northern overhead line route.</li> </ul>			
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Motorists driving on the B1119 Saxmundham Road:	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent

### Viewpoint 14 Grove Road

Viewpoint 14 Grove Road				
Designations:	None	Grid reference:	E: 641619	N: 261025
LCT:	Estate Sandlands (7)	View direction:	279°	
		Distance to the onshore substation:	0.15km	
Receptors:	The viewpoint is located on Grove Road, adjacent to Grove Wood and between Friston and Laurel Covert, where the view becomes opens to the north and west of the road. The viewpoint is representative of views experienced primarily by motorists and cyclists on Grove Road.			



**Viewpoint 14 Grove Road**

Baseline description (existing view is shown in **Figure 29.26a**):

- Open view across medium to large scale, arable agricultural fields, which is flat and open, but also partially enclosed by hedgerows, scattered stands of trees and woodland blocks.
- The foreground is occupied by agricultural arable farmland, extending into the distance over gently undulating terrain, which rises gradually to the north to provide some containment to landscape, reinforced by the woodland blocks on the skyline.
- The landscape is well wooded, with a large stand of ancient, semi-natural woodland at Grove Wood and the adjoining woodland of Laurel Covert forming the backdrop and providing enclosure of the view. Other smaller stands of woodland and thicker areas of hedgerow combine to provide further wooded cover, particularly alongside Grove Road to the south.
- The landform is a gently undulating plateau, rising gradually to the north
- The skyline of the view is traversed by the existing National Grid high voltage overhead transmission line and double row of electrical pylons, with electrical lines strung across the skyline of the view.
- The composition of the view is relatively simple, consisting mainly of agricultural fields, woodland and sky, although it is interrupted by the tall vertical pylons behind the wooded backdrop.
- There is relatively little built development visible, but Moor Farm (Fristonmoor) forms a focal point on the skyline. Its vernacular building style of dark weatherboard and red-tiled roof are distinctive.

Sensitivity to change: *Combination of the value of the view and the susceptibility of each visual receptor*

Value:	Medium
--------	--------

- The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it a view which has been identified in policy or guidance. It is not a notable viewpoint of specific importance.
- The view is representative of the view experienced by motorists and cyclists passing by on Grove Road, while either driving north out of Friston; or approaching the village southwards. The view is specific to these areas and generally used by local traffic and cyclists, however the rural setting of the view is likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character and setting of their place of residence.
- The view displays traditional rural qualities and some scenic interest arising from the interaction of the arable agricultural fields in the setting of a large areas of semi-natural ancient woodland, while also being influenced by the pylons on the skyline.

Receptor	Susceptibility change	to	Sensitivity to change
Motorists driving north on Grove Road out of Friston:	Medium		Medium
Cyclists heading north on Grove Road out of Friston:	Medium-high		Medium-high

Magnitude of change:

Geographic extent:	Short distance/local extent
--------------------	-----------------------------

The onshore substation will be visible at short distance and local extent (and local context), in the immediate foreground of the view, located at a distance of approximately 0.15km to the north-west of the viewpoint. The National Grid substation is located 0.33km from the viewpoint. The view of the onshore substation is representative of views from a localised area of Grove Road between Friston and Laurel Covert, the closest section of Grove Road to the onshore substation.

Magnitude of change (construction):	High (during construction period)
-------------------------------------	-----------------------------------

- The construction of the onshore substation, National Grid substation, access road and onshore cable route will be visible in close proximity, in the foreground of the view.
- The construction of the onshore infrastructure will result in a large-scale change in the view, due to the size, extent and close proximity of the onshore substation, National Grid substation and

**Viewpoint 14 Grove Road**

construction compounds, together with fencing, access road, vehicles, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period, which come closer to the viewpoint than the onshore substation.

- During the construction period, the built form of the onshore substation and National Grid substation will take shape during the construction and installation of the substation platforms, GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc). With progress through the construction period, the built forms of the constructed infrastructure will increase the influence of large buildings and infrastructure, such that electrical infrastructure becomes the prevailing feature of the view.
- During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons. The installation of sealing end compounds will also be partially visible, although largely behind the foreground substations, allowing the existing 400kV overhead lines to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the National Grid substation.
- The construction of the onshore infrastructure will result in some changes in ground profiles within and immediately around the onshore substation and National Grid substation.
- Physical loss of hedgerows and a small area of woodland at Laurel Covert will be visible within the onshore substation and National Grid substation.
- Task and vehicle lighting may be used in the hours of darkness during approved working hours.

Magnitude of change (operation, first year of operational phase): <b>(Figure 29.26b)</b>	High
---	------

- The operational onshore substation and National Grid substation will be visible in close proximity, in the immediate foreground of the view, although the National Grid substation will largely be screened behind the intervening East Anglia ONE North onshore substation which will form the foreground.
- The operation of the onshore infrastructure will result in a large-scale change in the view, due to the size, extent and close proximity of the onshore substation, National Grid substation, together with fencing and operation and maintenance (O&M) vehicles during the operational period.
- During the operational period, the complex built form of the onshore substation and National Grid substation, including GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc) will be the prevailing feature of the view. The harmonic filters, in particular, will be prominent as tall elements in the foreground.
- The onshore substation will be viewed in the landscape context of the adjacent high-voltage transmission line. National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons..
- The sealing end compounds will be located behind the National Grid substation and East Anglia ONE North onshore substation.
- The onshore infrastructure will have resulted in some changes in ground profiles within and immediately around the onshore substation and National Grid substation.
- By the first year of the operational phase, pre-construction woodland planting along Grove Road (**Figure 29.12**) will occupy the immediate foreground of the view and is assumed to have established and had several years growth during the construction period, but will have limited influence as screening feature by the first year of the operational phase.
- The onshore substation and National Grid substation will be viewed within a wooded envelope, in the backdrop of semi-natural ancient woodland, which provides some mitigation though its visual

Viewpoint 14 Grove Road			
containment and its natural appearance, which offsets the technological appearance of the onshore substation.			
<ul style="list-style-type: none"> <li>Lighting of the onshore substation will be visible at night, but this is assumed to be passive lighting (passive infra-red) and the onshore substation will not be permanently lit at night.</li> </ul>			
Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.26c</b> )		Negligible	
<ul style="list-style-type: none"> <li>Mitigation woodland planting between the viewpoint and the onshore substation will be located in the immediate foreground of the view and is predicted to entirely screen the view of the onshore substation and National Grid substation. Mitigation woodland planting which will be in the immediate foreground of the view (directly in front of the viewpoint) is shown in the photomontage in <b>Figure 29.26c</b>, to provide an illustration of the landscape mitigation planting around the onshore substation site.</li> <li>Mitigation planting will reduce the magnitude of change to negligible after approximately 15 years post-construction, when the woodland planting is predicted to have grown to provide screening of the onshore substation and National Grid substation in the view.</li> </ul>			
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Motorists driving north on Grove Road out of Friston:	Significant, short-term, temporary	Significant, long-term, temporary	Not significant, long-term, permanent
Cyclists heading north on Grove Road out of Friston:	Significant, short-term, temporary	Significant, long-term, temporary	Not significant, long-term, permanent

### 29.3.1.1.2 Settlements

32. An assessment of the visual effects of the onshore substation and National Grid substation on views experienced by residents of Friston is presented in the following technical assessment. The visual effects of the onshore substation and National Grid substation have been assessed as not significant on all other settlement receptors in the preliminary assessment in **section 29.2.3.1**.

### Friston

Residents of Friston	
Representative viewpoints:	Viewpoints 1, 2, 4, 6 and 9
Sensitivity to change:	
Residents of Friston:	High
Magnitude of change (predicted views from Friston are shown in <b>Figures 29.13, 29.14, 29.16, 29.18 and 29.21</b> )	
Geographic extent:	
The village of Friston is located between 430m – 1.2km to the south of the onshore substation. The village has developed to have a distinct form, with a group of dwellings clustered around Friston Church, in the Church Road and Grove Road area in the north of the village. Several dwellings are located along the track extending north of Church Road to Woodside Farm. A secondary area has developed, fanning out on the manorial wasteland to the south of the village centre. This area was known as The Common until recently, and is now formed by housing on Low Road, Chase’s Lane and	

**Residents of Friston**

Donkey Lane. These distinct areas, to the north and south of the village are located on either side of the public open space/village green in the centre of the village. The B1121 Aldeburgh Road/Saxmundham Road passes through the centre of the village, further defining these areas to the north and south of this main road. Friston House and its wooded grounds are situated to the north of the village and provide visual enclosure along part of Church Road. The magnitude of change resulting from the onshore substation and National Grid substation is considered for areas to the north of the village formed by Church Road, Grove Road and the village green (Area A); Friston village centre/green (Area B) and to the south of the village formed by Low Road, Chase's Lane and Donkey Lane (Area C). The magnitude of change resulting from the onshore substation and National Grid substation varies across these northern and southern areas of the village.

**Area A: Northern part of Friston (Church Road/Grove Road)**

Magnitude of change (construction):	High
-------------------------------------	------

- The northern edges of Friston are most exposed to the changes resulting from the construction of the onshore substation and National Grid substation, where there will be some views north of the construction of the onshore substation and National Grid substation at close range from the track leading to Woodside Farm (Viewpoint 1) and from the eastern half of Church Road, through layers of intervening hedgerows and field boundary trees (Viewpoint 2). There will also be views of the construction from Grove Road, particularly near Church Road, on the northern edge of Friston (Viewpoint 4). The magnitude of change resulting from the construction of the onshore substation and National Grid substation on views from these areas of the village is assessed as varying between medium and high with the degree of intervening foreground screening on the northern edge of the village. Although there is often considerable intervening screening, which breaks up views of the onshore substation, the construction of the onshore substation and National Grid substation will generally result in high changes in views from this northern edge of Friston, due to the size, extent and proximity of the built features taking shape during the construction period, together with the additional visual influence of fencing, the access road, vehicles, machinery, accommodation and cranes needed during the construction period.
- Views from the western half of Church Road and Hillcrest are screened by the intervening woodland within the grounds of Friston House. The magnitude of change resulting from the construction of the onshore substation and National Grid substation on views from these areas of the village is assessed as negligible.

Magnitude of change (operation, first year of operational phase):	High
---	------

- The northern edges of Friston are most exposed to the changes resulting from the operation of the onshore substation and National Grid substation, where there will be some views north of the operational onshore substation and National Grid substation at close range from the track leading to Woodside Farm (Viewpoint 1) and from the eastern half of Church Road, through layers of intervening hedgerows and field boundary trees (Viewpoint 2). There will also be views of the construction from Grove Road, particularly near Church Road, on the northern edge of Friston (Viewpoint 4). The magnitude of change resulting from the operation of the onshore substation and National Grid substation on views from these areas of the village is assessed as generally high, but varying between medium and high with the degree of intervening foreground screening on the northern edge of the village. Although there is often considerable intervening screening, which breaks up views of the onshore substation, the operation of the onshore substation and National Grid substation will generally result in medium-high changes in views from this northern edge of Friston, due to the size, extent and proximity of the built features such as GIS buildings and external electrical infrastructure, together with the additional visual influence of fencing, the access road and O&M vehicles during the operational period.
- Views from the western half of Church Road and Hillcrest are screened by the intervening woodland within the grounds of Friston House. The magnitude of change resulting from the operation of the onshore substation and National Grid substation on views from these areas of the village is assessed as negligible.

Residents of Friston	
Magnitude of change (operation, 15 years post construction):	Medium-high
<ul style="list-style-type: none"> <li>The magnitude of change during the operational phase, 15 years post construction, on views experienced by residents of the northern edges Friston varies depending on the viewing location, as is evident in the representative viewpoint assessments from Viewpoints 1, 2 and 4. The magnitude of change is assessed as medium-high from the northern edges of Friston near Church Road (Viewpoint 2); medium from Grove Road (Viewpoint 4) and negligible from Viewpoint 1 (near Friston House).</li> <li>The operational onshore substation, National Grid substation and access road will be partially visible in the mid-ground of these views from the northern edges of Friston, but will be increasingly screened by layers of re-instated hedgerows, individual field boundary trees and woodland (as per the OLMP in <b>Figure 29.11a-b</b> and <b>Figure 29.12</b>).</li> <li>It will mainly be the upper parts of the taller infrastructure and buildings within the onshore substation that will be visible, beyond and above the intervening woodland and hedgerows, with the lower infrastructure and ground level features entirely screened.</li> <li>The National Grid substation will largely be screened behind layers of hedgerows and woodland areas, with just the tops of the gantries visible near the overhead pylons. The sealing end compounds will not generally be visible in these views from the northern edges of Friston.</li> <li>Hedgerows will combine with woodland planting areas to integrate the substations into the landscape, providing both screening and an extension of elements that are characteristic in the local landscape.</li> <li>Although it will result in a more wooded setting to the north of Friston, with the maturing woodland, the open agricultural setting of the village has been retained in views from the northern edges of Friston, with screening achieved through multiple lines of planting, with a mix of blocks, belts, tree lines and reinstated hedges.</li> <li>The onshore substation will be viewed in the landscape context of the adjacent high-voltage transmission line. National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons.</li> </ul>	
Area B: Friston village centre	
Magnitude of change (construction):	Low
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the construction of the onshore substation and National Grid substation on views from the centre of Friston, such as the public open space/village green (Viewpoint 6) is assessed as low. The construction of the onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees. Only the top of the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible beyond intervening foreground buildings and trees during construction, substantially screened by intervening trees and will only be slightly apparent in the view. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change resulting from the onshore substation and National Grid substation from the village centre.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Low
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the operation of the onshore substation and National Grid substation on views from the centre of Friston, such as the public open space/village green (Viewpoint 6) is assessed as low. The operation of the onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees. Only the top of the larger elements associated with the higher electrical infrastructure, such as the harmonic filters, will be visible beyond intervening foreground buildings and trees, substantially screened by intervening trees and will only be slightly apparent in the view.</li> </ul>	

Residents of Friston	
Viewpoint 6 ( <b>Figure 29.18</b> ) provides a representative example of the likely change resulting from the onshore substation and National Grid substation from the village centre.	
Magnitude of change (operation, 15 years post construction):	Low
<ul style="list-style-type: none"> <li>Mitigation woodland planting and individual tree planting along the intervening field boundary to the north of Friston, is predicted to have grown to providing further screening of the components of the onshore substation and National Grid substation, however the magnitude of change remains low after approximately 15 years post construction, due to the partial visibility of the upper parts of some of the taller infrastructure in views.</li> </ul>	
Area C: Aldeburgh Road	
Magnitude of change (construction):	Medium-low (during construction period)
<ul style="list-style-type: none"> <li>The magnitude of change during construction resulting from the onshore substation and National Grid substation on views from the southern part of Friston along Aldeburgh Road (Viewpoint 9) is assessed as medium-low. The construction of the onshore substation and National Grid substation will largely be screened during the construction period by housing in Friston in the foreground and intervening layers of vegetation/trees within and to the north of the village. The larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the upper parts of the harmonic filters, will be visible during construction through intervening trees and will be apparent in the backdrop to the village, beyond intervening housing and vegetation in views. The construction of the onshore substation and National Grid substation will result in medium-low changes in the views from this area of the village, due to the extent of intervening screening. the limited amount of the onshore substation and National Grid substation visible and because they will be viewed in the context of the existing National Grid overhead line which form the backdrop to Friston in these views. Lower lying features such as fencing, access roads, vehicles, the stockpiling of subsoil/topsoil and changes in ground profiles and SUDs basins will not be visible. Viewpoint 9 (<b>Figure 29.21</b>) provides a representative example of the likely change resulting from the onshore substation and National Grid substation from the southern part of Friston.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Medium-low
<ul style="list-style-type: none"> <li>The magnitude of change during operation resulting from the onshore substation and National Grid substation on views from the southern part of Friston along Aldeburgh Road (Viewpoint 9) is assessed as medium-low. The operation of the onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees within and to the north of the village. The larger elements associated with the operational onshore substation, such as the higher electrical infrastructure e.g. the upper parts of harmonic filters, will be visible during operation and will be apparent in the backdrop to the village, beyond intervening housing and vegetation in views. The operation of the onshore substation and National Grid substation will result in medium-low changes in the views from this area of the village, due to the extent of intervening screening and the limited amount of the onshore substation and National Grid substation visible and because they will be viewed in the context of the existing National Grid overhead line which form the backdrop to Friston in these views. Lower lying features such as fencing, access roads, vehicles, the stockpiling of subsoil/topsoil and changes in ground profiles and SUDs basins will not be visible. The re-aligned National Grid pylon towers will be visible in the backdrop to the village, consisting of two new pylons and the modification or replacement of another pylon. Viewpoint 9 (<b>Figure 29.21</b>) provides a representative example of the likely change resulting from the onshore substation and National Grid substation from the southern part of Friston.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Medium-low
<ul style="list-style-type: none"> <li>Mitigation planting will be partially visible in the backdrop to Friston in the views from Aldeburgh Road, providing further partial screening of the onshore substation and National Grid substation, however in these views experienced by residents of Aldeburgh Road on the southern edge of Friston, it is not likely to have grown high enough, after 15 years, to screen the taller elements of</li> </ul>	

Residents of Friston			
the electrical infrastructure, which will remain visible in the backdrop to Friston, such that magnitude of change remains medium-low.			
Area D: Southern part of Friston (Low Road, Chase's Lane and Donkey Lane)			
Magnitude of change (construction):		Low	
Magnitude of change (operation, first year of operational phase):		Low	
Magnitude of change (operation, 15 years post construction with mitigation):		Negligible	
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Residents of Friston (Area A) Northern part of Friston (Church Road/Grove Road)	Significant, short-term, temporary (during construction period)	Significant, long-term, temporary from Church Road area of Friston. Not significant, long-term, temporary from Grove Road area of Friston.	Significant, long-term, permanent from Church Road area of Friston. Not significant, long-term, permanent from Grove Road area of Friston.
Residents of Friston (Area B) Friston village centre	Not significant, short-term, temporary (during construction period)	Not significant, long-term, temporary	Not significant, long-term, permanent
Residents of Friston (Area C) Aldeburgh Road	Significant, short-term, temporary (during construction period)	Significant, long-term, temporary	Significant, long-term, permanent
Residents of Friston (Area D) Southern part of Friston (Low Road, Chase's Lane and Donkey Lane)	Not significant, short-term, temporary (during construction period)	Not significant, long-term, temporary	Not significant, long-term, permanent

### 29.3.1.1.3 Transport Routes

33. An assessment of the visual effects of the onshore substation and National Grid substation from the B1121 and Grove Road transport routes (**Figure 29.9**) is presented in the following technical assessment. The visual effects of the onshore substation and National Grid substation have been assessed as not significant on views experienced by motorists on all other transport routes in the preliminary assessment in **section 29.2.3.1**.

### B1121 Aldeburgh / Saxmundham Road

Motorists travelling on B1121 Aldeburgh / Saxmundham Road	
Representative viewpoints:	Viewpoints 8 and 9
Sensitivity to change:	

Motorists travelling on B1121 Aldeburgh / Saxmundham Road	
Motorists on B1121 Aldeburgh / Saxmundham Road:	Medium
Magnitude of change:	
Section A: Saxmundham to north of Moor Farm (Saxmundham Road)	
Magnitude of change (construction):	Negligible (during construction period)
<ul style="list-style-type: none"> <li>Motorists on the B1121 between Saxmundham and north of Moor Farm will generally have no views, or at most experience a negligible change to their views, due to the construction of the onshore substation and National Grid substation.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Negligible
<ul style="list-style-type: none"> <li>Motorists on the B1121 between Saxmundham and north of Moor Farm will generally have no views, or at most experience a negligible change to their views, due to the operation of the onshore substation and National Grid substation.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Negligible
<ul style="list-style-type: none"> <li>Motorists on the B1121 between Saxmundham and north of Moor Farm will generally have no views, or at most experience a negligible change to their views, due to the operation of the onshore substation and National Grid substation.</li> </ul>	
Section B: North of Moor Farm to Friston House (Saxmundham Road)	
Magnitude of change (construction):	Medium-high (during construction period)
<ul style="list-style-type: none"> <li>Motorists on the B1121 between Moor Farm and Friston House will experience a medium-high change to views experienced from this section of the road due to the construction of the onshore substation and National Grid substation to the east of the road. Viewpoint 8 (<b>Figure 29.20</b>) provides a representative example of the likely change in views from this section of the B1121. The construction of the onshore substation, National Grid substation and access road will be visible in close proximity, in the foreground and midground of the oblique views east and will be viewed in the context of the large-scale pylons and high voltage overhead transmission line which dominate the existing view. Changes to view from this section of the B1121 arising from the construction of the onshore substation and National Grid substation will occur due to the scale, extent and close proximity of the GIS buildings and electrical infrastructure taking shape during the construction period, together with construction compounds, fencing, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period. The construction of the access road off this section of the B1121 will also be prominent in the foreground of views experienced by motorists. The scale of the onshore substation and National Grid substation is subsumed below the vertical scale of the electrical pylons prominent in views from this section of the road and is also contained by and is lower in height than Grove Wood in the backdrop.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Medium-high
<ul style="list-style-type: none"> <li>Motorists on the B1121 between Moor Farm and Friston House will experience a medium-high change to views experienced from this section of the road due to the operation of the onshore substation and National Grid substation to the east of the road. Viewpoint 8 (<b>Figure 29.20</b>) provides a representative example of the likely change in views from this section of the B1121. The operational onshore substation, National Grid substation and access road will be visible in close proximity, in the foreground and midground of the oblique views east and will be viewed in the context of the large-scale pylons and high voltage overhead transmission line which dominate the existing view. Changes to view from this section of the B1121 arising from the operational onshore substation and National Grid substation will occur due to the scale, extent and close proximity of the GIS buildings and electrical infrastructure, together with the access road off this section of the B1121, which will be prominent in the foreground of views experienced by motorists. The scale of the onshore substation and National Grid substation is subsumed below the vertical scale of the</li> </ul>	



Motorists travelling on B1121 Aldeburgh / Saxmundham Road	
electrical pylons prominent in views from this section of the road and is also contained by Grove Wood in the backdrop.	
Magnitude of change (operation, 15 years post construction):	Medium
<ul style="list-style-type: none"> <li>Mitigation planting will be visible in the mid-ground of the view around the onshore substation and National Grid substation and will reduce visibility of the built infrastructure, including the sealing end compounds. Mitigation planting will reduce the magnitude of change to medium after 15 years when the woodland planting is predicted to have grown to provide partial screening of the onshore substation, National Grid substation and sealing end compounds in the view, softening its appearance and partially integrating it into the well wooded landscape context.</li> </ul>	
Section C: Friston House through Friston (Saxmundham Road)	
Magnitude of change (construction):	Low (during construction period)
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the construction of the onshore substation and National Grid substation on views from the B1121 passing through the centre of Friston is assessed as low. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change in views from this section of the B1121. The construction of the onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees, particularly woodlands within the grounds of Friston House. Only the top of the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible beyond intervening foreground buildings and trees during construction, substantially screened by intervening trees and will only be slightly apparent in views.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Low
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the operation of the onshore substation and National Grid substation on views from the B1121 passing through the centre of Friston is assessed as low. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change in views from this section of the B1121. The operational onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees, particularly woodlands within the grounds of Friston House. Only the top of the larger elements of electrical infrastructure will be visible intermittently beyond intervening foreground buildings and trees during operational, substantially screened by intervening trees and will only be slightly apparent in views.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Negligible
<ul style="list-style-type: none"> <li>Mitigation woodland planting along the intervening field boundary to the north of Friston, is predicted to have grown to almost entirely screen the views of the onshore substation and National Grid substation, reducing the magnitude of change to negligible after approximately 15 years post construction.</li> </ul>	
Section D: South of Friston (Aldeburgh Road)	
Magnitude of change (construction):	Medium-low (during construction period)
<ul style="list-style-type: none"> <li>Motorists on the B1121 Aldeburgh Road extending south out of Friston will experience a medium-low change to views due to the construction of the onshore substation and National Grid substation to the north-east of the road. Viewpoint 9 (<b>Figure 29.21</b>) provides a representative example of the likely change in views from this section of the B1121. The construction of the onshore substation and National Grid substation will largely be screened during the construction period by housing in Friston in the foreground and intervening layers of vegetation/trees within and to the north of the village. Only the upper parts of the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible during construction through intervening trees and will be slightly apparent in the backdrop to the village, in glimpsed views from this sections of the road, beyond intervening housing and vegetation in views. Lower lying features such as fencing, access roads,</li> </ul>	

Motorists travelling on B1121 Aldeburgh / Saxmundham Road			
vehicles, the stockpiling of subsoil/topsoil and changes in ground profiles and SUDs basins will not be visible.			
Magnitude of change (operation, first year of operational phase):		Medium-low	
<ul style="list-style-type: none"> <li>Motorists on the B1121 Aldeburgh Road extending south out of Friston will experience a medium-low change to views due to the operation of the onshore substation and National Grid substation to the north-east of the road. Viewpoint 9 (<b>Figure 29.21</b>) provides a representative example of the likely change in views from this section of the B1121. The operation of the onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees within and to the north of the village. Only the upper parts of the larger elements associated with the operation of the onshore infrastructure, such as the top of the harmonic filters, will be partially apparent in the backdrop to the village, beyond intervening housing and vegetation in glimpsed views from this section of the road. Lower lying features such as fencing, access roads, vehicles and SUDs basins will not be visible.</li> </ul>			
Magnitude of change (operation, 15 years post construction):		Medium-low	
<ul style="list-style-type: none"> <li>Mitigation planting will be partially visible in the backdrop to Friston in the views from this section of the B1121 Aldeburgh Road, providing further partial screening of the onshore substation and National Grid substation, however in these views experienced by motorists on the B1121 Aldeburgh Road on the southern edge of Friston, it is not likely to have grown high enough, after 15 years, to screen the taller elements of the electrical infrastructure, which will remain partially visible in the backdrop in glimpsed views to Friston from this section of the road, such that magnitude of change remains low.</li> </ul>			
Significance of effect:			
Receptor: Motorists on B1121	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Section A: Saxmundham to north of Moor Farm (Saxmundham Road)	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Section B: North of Moor Farm to Friston House (Saxmundham Road)	Significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Section C: Friston House through Friston (Saxmundham Road)	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Section D: South of Friston (Aldeburgh Road)	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent

## Grove Road

Motorists travelling on Grove Road	
Representative viewpoints:	Viewpoints 3 and 4
Sensitivity to change:	
Motorists on Grove Road:	Medium
Cyclists on Grove Road:	Medium-high
Magnitude of change:	
Section A: Saxmundham Road to Grove Wood	

Motorists travelling on Grove Road	
Magnitude of change (construction):	Low to negligible (during construction period)
<ul style="list-style-type: none"> <li>Motorists on Grove Road between Saxmundham Road and Grove Wood (Manor Farm) will generally have no views, or at most experience a negligible to low change to their views, due to the construction of the onshore substation and National Grid substation. Views of the construction of the onshore substation and National Grid substation are either screened by hedgerow along this section of Grove Road or screened by the mature woodland at Laurel Covert and around Fareacres Farm. Viewpoint 3 (<b>Figure 29.15</b>) provides a representative example of the likely change in views from this section of Grove Road.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Low to negligible
<ul style="list-style-type: none"> <li>Motorists on Grove Road between Saxmundham Road and Grove Wood (Manor Farm) will generally have no views, or at most experience a negligible to low change to their views, due to the operation of the onshore substation and National Grid substation. Views of the operation of the onshore substation and National Grid substation are either screened by hedgerow along this section of Grove Road or screened by the mature woodland at Laurel Covert and around Fareacres Farm. Viewpoint 3 (<b>Figure 29.15</b>) provides a representative example of the likely change in views from this section of Grove Road.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Low to negligible
<ul style="list-style-type: none"> <li>Motorists on Grove Road between Saxmundham Road and Grove Wood (Manor Farm) will generally have no views, or at most experience a negligible to low change to their views, due to the operation of the onshore substation and National Grid substation. Screening woodland belts to the north of Grove Wood are predicted to have grown to provide further screening in views from this section of Grove Road.</li> </ul>	
Section B: Grove Wood (Manor Farm) to northern edge of Friston	
Magnitude of change (construction):	High (during construction period)
<ul style="list-style-type: none"> <li>Motorists and cyclists on Grove Road between Grove Wood (Manor Farm) and the north edge of Friston will experience a high magnitude of change to views experienced from this section of the road due to the construction of the onshore substation and National Grid substation. The construction of the onshore substation and National Grid substation will be visible in close proximity in the foreground of the views to the immediate west of the road. Changes to view from this section of Grove Road arising from the construction of the onshore substation and National Grid substation will occur due to the scale, extent and close proximity of the GIS buildings and electrical infrastructure taking shape during the construction period, together with construction compounds, fencing, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period. The construction of the onshore cable route into the onshore substation will also be prominent in views from this section of Grove Road. The scale and extent of the construction of the onshore substation and National Grid substation will result in a particularly large change from this localised section of Grove Road, due to the close proximity (0.11km), however the onshore substation and National Grid substation will be partially contained by the mature woodland at Grove Wood/Laurel Covert, the rising landform to the north and will be viewed in the context of the existing National Grid transmission line.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	High
<ul style="list-style-type: none"> <li>Motorists and cyclists on Grove Road between Grove Wood (Manor Farm) and the north edge of Friston will experience a high magnitude of change to views experienced from this section of the road due to the operation of the onshore substation and National Grid substation. Viewpoint 14 provides a representative view (<b>Figure 29.26b</b>) from this closest section of Grove Road at the first year of the operational phase. The operation of the onshore substation and National Grid substation will be visible in close proximity in the foreground of the views to the immediate west of the road. Changes to view from this section of Grove Road arising from the operation of the onshore substation and National Grid substation will occur due to the scale, extent and close proximity of the GIS buildings and electrical infrastructure, such as the GIS buildings and external electrical</li> </ul>	

Motorists travelling on Grove Road	
<p>infrastructure (e.g. harmonic filters and transformers). The scale and extent of the operational onshore substation and National Grid substation will result in a particularly large change from this localised section of Grove Road, due to the close proximity (0.11km), however the onshore substation and National Grid substation will be partially contained by the mature woodland at Grove Wood/Laurel Covert, the rising landform to the north and will be viewed in the context of the existing National Grid transmission line. By the first year of the operational phase, pre-construction woodland planting along Grove Road (<b>Figure 29.12</b>) will occupy the immediate foreground of the view and is assumed to have established and had several years growth during the construction period, but will have limited influence as a screening feature by the first year of the operational phase.</p>	
Magnitude of change (operation, 15 years post construction):	Negligible
<ul style="list-style-type: none"> <li>Mitigation woodland planting between the viewpoint and the onshore substation will be located in the immediate foreground of the view and is predicted to entirely screen the view of the onshore substation and National Grid substation. Viewpoint 14 provides a representative view (<b>Figure 29.26c</b>) from this closest section of Grove Road, 15 years into the operational phase. Mitigation woodland planting which will be in the immediate foreground of the view (directly in front of the viewpoint) as shown in the photomontage in <b>Figure 29.26c</b>, to provide an illustration of the landscape mitigation planting around the onshore substation site.</li> <li>Mitigation planting will reduce the magnitude of change to negligible after approximately 15 years post-construction, when the woodland planting is predicted to have grown to provide screening of the onshore substation and National Grid substation in the view.</li> </ul>	
Section C: Grove Road through Friston	
Magnitude of change (construction):	Low (during construction period)
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the construction of the onshore substation and National Grid substation on views from Grove Road through Friston is assessed as low. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change in views from this section of Grove Road. The construction of the onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees, particularly woodlands within the grounds of Friston House. Only the top of the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible beyond intervening foreground buildings and trees during construction, substantially screened by intervening trees and will only be slightly apparent in views.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Low
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the operation of the onshore substation and National Grid substation on views from Grove Road passing through Friston is assessed as low. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change in views from this section of Grove Road. The operational onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees, particularly woodlands within the grounds of Friston House. Only the top of the larger elements of electrical infrastructure will be visible intermittently beyond intervening foreground buildings and trees during operation, substantially screened by intervening trees and will only be slightly apparent in views.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Low
<ul style="list-style-type: none"> <li>Mitigation planting along field boundaries to the north of Friston around the onshore substation and National Grid substation will further reduce visibility of the built infrastructure in views from Grove Road through Friston, with the magnitude of change remaining low after 15 years when the woodland planting is predicted to have grown to provide further screening.</li> </ul>	
Significance of effect:	

Motorists travelling on Grove Road			
Receptor: Motorists on Grove Road	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Section A: Saxmundham Road to Grove Wood	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Section B: Grove Wood (Manor Farm) to northern edge of Friston	Significant, short-term, temporary	Significant, long-term, temporary	Not significant, long-term, permanent
Section C: Grove Road through Friston	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent

#### 29.3.1.1.4 Recreational Routes

34. An assessment of the visual effects of the onshore substation and National Grid substation from the Suffolk Coastal Cycle Route and the Sandlings Walk (**Figure 29.9**) is presented in the following technical assessment. The visual effects of the onshore substation and National Grid substation have been assessed as not significant on views experienced by people walking and cycling on all other recreational routes in the preliminary assessment in **section 29.2.3.1**.

#### Suffolk Coastal Cycle Route (Regional Route 42)

Cyclists travelling on Suffolk Coastal Cycle Route (Regional Route 42)	
Representative viewpoints:	Viewpoints 3 and 4
Sensitivity to change:	
Cyclists on Suffolk Coastal Cycle Route:	Medium-high
Magnitude of change:	
Section A: Northern edge of study area to Grove Wood	
Magnitude of change (construction):	Low to negligible (during construction period)
<ul style="list-style-type: none"> <li>Cyclists travelling on the Suffolk Coastal Cycle Route between the northern edge of the study area and Grove Wood (Manor Farm) will generally have no views, or at most experience a negligible to low change to their views, due to the construction of the onshore substation and National Grid substation. Views of the construction of the onshore substation and National Grid substation are either screened by hedgerow along the minor roads which the cycle route takes, such as Grove Road, or screened by the mature woodland at Laurel Covert and around Fareacres Farm. Viewpoint 3 (<b>Figure 29.15</b>) provides a representative example of the likely change in views from the Suffolk Coastal Cycle Route from Grove Road on this section of the route.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Low to negligible
<ul style="list-style-type: none"> <li>Cyclists on the Suffolk Coastal Cycle Route between the northern edge of the study area and Grove Wood (Manor Farm) will generally have no views, or at most experience a negligible to low change to their views, due to the operation of the onshore substation and National Grid substation. Views of the operation of the onshore substation and National Grid substation are either screened by hedgerow along the minor roads forming this section of the cycle route or screened by the mature woodland at Laurel Covert and around Fareacres Farm. Viewpoint 3 (<b>Figure 29.15</b>) provides a representative example of the likely change in views from Grove Road on this section of the route.</li> </ul>	

Cyclists travelling on Suffolk Coastal Cycle Route (Regional Route 42)	
Magnitude of change (operation, 15 years post construction):	Low to negligible
<ul style="list-style-type: none"> <li>Cyclists on the Suffolk Coastal Cycle Route between Saxmundham Road and Grove Wood (Manor Farm) will generally have no views, or at most experience a negligible to low change to their views, due to the operation of the onshore substation and National Grid substation. Screening woodland belts to the north of Grove Wood are predicted to have grown to provide further screening in views from this section of Grove Road.</li> </ul>	
Section B: Grove Wood (Manor Farm) to northern edge of Friston	
Magnitude of change (construction):	High (during construction period)
<ul style="list-style-type: none"> <li>Cyclists on the Suffolk Coastal Cycle Route travelling along Grove Road between Grove Wood (Manor Farm) and the north edge of Friston will experience a high magnitude of change to views experienced from this section of the road due to the construction of the onshore substation and National Grid substation. The construction of the onshore substation and National Grid substation will be visible in close proximity in the foreground of the views to the immediate west of the road. Changes to view from this section of the cycle route along Grove Road arising from the construction of the onshore substation and National Grid substation will occur due to the scale, extent and close proximity of the GIS buildings and electrical infrastructure taking shape during the construction period, together with construction compounds, fencing, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period. The construction of the onshore cable route into the onshore substation will also be prominent in views from this section of the cycle route. The scale and extent of the construction of the onshore substation and National Grid substation will result in a particularly large change from this localised section of the cycle route along Grove Road, due to the close proximity (0.11km), however the onshore substation and National Grid substation will be partially contained by the mature woodland at Grove Wood/Laurel Covert, the rising landform to the north and will be viewed in the context of the existing National Grid transmission line.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	High
<ul style="list-style-type: none"> <li>Cyclists on the Suffolk Coastal Cycle Route travelling along Grove Road between Grove Wood (Manor Farm) and the north edge of Friston will experience a high magnitude of change to views experienced from this section of the road due to the operation of the onshore substation and National Grid substation. Viewpoint 14 provides a representative view (<b>Figure 29.26b</b>) from this closest section of Grove Road at the first year of the operational phase. The operation of the onshore substation and National Grid substation will be visible in close proximity in the foreground of the views to the immediate west of the road. Changes to view from this section of the cycle route Grove Road arising from the operation of the onshore substation and National Grid substation will occur due to the scale, extent and close proximity of the GIS buildings and electrical infrastructure, such as the GIS buildings and external electrical infrastructure (e.g. harmonic filters and transformers). The scale and extent of the operational onshore substation and National Grid substation will result in a particularly large change from this localised section of the cycle route along Grove Road, due to the close proximity (100m), however the onshore substation and National Grid substation will be partially contained by the mature woodland at Grove Wood/Laurel Covert, the rising landform to the north and will be viewed in the context of the existing National Grid transmission line. By the first year of the operational phase, pre-construction woodland planting along Grove Road (<b>Figure 29.12</b>) will occupy the immediate foreground of the view and is assumed to have established and had several years growth during the construction period, but will have limited influence as a screening feature by the first year of the operational phase.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Negligible
<ul style="list-style-type: none"> <li>Mitigation woodland planting between the viewpoint and the onshore substation will be located in the immediate foreground of the view and is predicted to entirely screen the view of the onshore substation and National Grid substation. Viewpoint 14 provides a representative view (<b>Figure 29.26c</b>) from this closest section of Grove Road, 15 years into the operational phase. Mitigation</li> </ul>	

Cyclists travelling on Suffolk Coastal Cycle Route (Regional Route 42)			
<p>woodland planting which will be in the immediate foreground of the view (directly in front of the viewpoint) as shown in the photomontage in <b>Figure 29.26c</b>, to provide an illustration of the landscape mitigation planting around the onshore substation site.</p> <ul style="list-style-type: none"> <li>Mitigation planting will reduce the magnitude of change to negligible after approximately 15 years post-construction, when the woodland planting is predicted to have grown to provide screening of the onshore substation and National Grid substation in the view.</li> </ul>			
Section C: Grove Road through Friston			
Magnitude of change (construction):		Low (during construction period)	
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the construction of the onshore substation and National Grid substation on views from this section of the Suffolk Coastal Cycle route through Friston is assessed as low. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change in views from this section of the cycle route. The construction of the onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees, particularly woodlands within the grounds of Friston House. Only the top of the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible beyond intervening foreground buildings and trees during construction, substantially screened by intervening trees and will only be slightly apparent in views.</li> </ul>			
Magnitude of change (operation, first year of operational phase):		Low	
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the operation of the onshore substation and National Grid substation on views from this section of the Suffolk Coastal Cycle route passing through Friston is assessed as low. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change in views from this section of the Suffolk Coastal Cycle route. The operational onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees, particularly woodlands within the grounds of Friston House. Only the top of the larger elements of electrical infrastructure will be visible intermittently beyond intervening foreground buildings and trees during operational, substantially screened by intervening trees and will only be slightly apparent in views.</li> </ul>			
Magnitude of change (operation, 15 years post construction):		Low	
<ul style="list-style-type: none"> <li>Mitigation planting along field boundaries to the north of Friston around the onshore substation and National Grid substation will further reduce visibility of the built infrastructure in views from Grove Road through Friston, with the magnitude of change remaining low after 15 years when the woodland planting is predicted to have grown to provide further screening.</li> </ul>			
Significance of effect:			
Receptor: Cyclists on Suffolk Coastal Cycle Route	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Section A: Northern edge of study area to Grove Wood	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Section B: Grove Wood (Manor Farm) to northern edge of Friston	Significant, short-term, temporary	Significant, long-term, temporary	Not significant, long-term, permanent
Section C: Suffolk Coastal Cycle Route through Friston	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent

## Sandlings Walk

Walkers on Sandlings Walk	
Representative viewpoints:	Viewpoints 4, 7, 12 and 13
Sensitivity to change:	
Walkers on Sandlings Walk:	High
Magnitude of change:	
Section A: Southern edge of study area at Snape to Friston (Grove Road)	
Magnitude of change (construction):	Low to negligible (during construction period)
<ul style="list-style-type: none"> <li>Walkers on the Sandlings Walk between the southern edge of the study area and Friston (Grove Road) will generally have no views, or at most experience a negligible to low change to their views, due to the construction of the onshore substation and National Grid substation. Views of the construction of the onshore substation and National Grid substation are either screened by hedgerows along the minor roads which the path follows, such as Grove Road, or screened by mature woodland at Friston House and Grove Wood. In the area through Friston the construction of the onshore substation and National Grid substation will largely be screened by housing in the foreground. Only the top of the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible beyond intervening foreground buildings and trees during construction and will only be slightly apparent in views. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change in views from the Sandlings Walk through the village of Friston.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Low to negligible
<ul style="list-style-type: none"> <li>Walkers on the Sandlings Walk between the southern edge of the study area and Friston (Grove Road) will generally have no views, or at most experience a negligible to low change to their views, due to the operation of the onshore substation and National Grid substation. Views of the operational onshore substation and National Grid substation are either screened by hedgerows or mature woodland at Friston House and Grove Wood. In the area between Friston Hall and the edge of Friston, there is some visibility of the taller components of the onshore substations in the backdrop behind Friston, however the magnitude of change would be low due to the relatively limited extent of the substation visible. Through Friston itself, on the Sandlings Walk, the operational onshore substation and National Grid substation will largely be screened by housing in the foreground. Only the top of the larger elements of electrical infrastructure will be visible intermittently beyond intervening foreground buildings and trees during operation, will only be slightly apparent in views. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change in views from the Sandlings Walk through the village of Friston.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Low to negligible
Section B: Friston (Grove Road) to Sloe Lane (Billeaford Hall)	
Magnitude of change (construction):	Low to negligible (during construction period)
<ul style="list-style-type: none"> <li>Walkers on the Sandlings Walk between Friston (Grove Road) and Sloe Lane (Billeaford Hall) will generally have no views or at most a negligible change to their views, due to the construction of the onshore substation and National Grid substation. Views of the construction of the onshore substation and the National Grid substation are largely screened primarily by intervening woodland at Grove Wood as well as by existing housing on the edge of Friston and smaller woodland coverts within the fields between the Sandlings Walk and the onshore substation and National Grid substation construction areas. Only the top of the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible beyond intervening foreground buildings and woodland during construction and they will only be slightly apparent in views. Viewpoint 7 and Viewpoint 12 (<b>Figure 29.19</b> and <b>Figure 29.24</b>) provide representative examples of the likely change</li> </ul>	



Walkers on Sandlings Walk	
in views from the Sandlings Walk within an agricultural field to the north east of Friston and fields on the edge of Knodishall Common respectively.	
Magnitude of change (operation, first year of operational phase):	Low to negligible
<ul style="list-style-type: none"> <li>Walkers on the Sandlings Walk between Friston (Grove Road) and Sloe Lane (Billeaford Hall) will generally have no views or at most a negligible change to their views, during the operation of the onshore substation and National Grid substation. Views of the onshore substation and the National Grid substation are largely screened primarily by intervening woodland at Grove Wood as well as by existing housing on the edge of Friston and smaller woodland coverts within the fields between the Sandlings Walk path and the onshore substation and National Grid substation area. Only the top of the larger elements of electrical infrastructure will be visible intermittently above buildings in the foreground at the edge of Friston. The remainder of the route will be substantially screened by intervening woodland and would not be apparent within views. Viewpoint 7 and Viewpoint 12 (<b>Figure 29.19</b> and <b>Figure 29.24</b>) provide representative examples of the likely change in views from the Sandlings Walk within an agricultural field to the north east of Friston and fields on the edge of Knodishall Common respectively.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Low to negligible
Section C: Sloe Lane (Billeaford Hall) to Aldringham Common	
Magnitude of change (construction):	Low to negligible (during construction period)
<ul style="list-style-type: none"> <li>The distance of this section of the Sandlings Walk between Sloe Lane (Billeaford Hall) and Aldringham Common from the onshore substation and the National grid substation (2.0km from Billeaford Hall and 4.5 km from Adringham), in combination with the presence of intervening woodland and hedgerows means that walkers will have no views or at most a negligible change to their views. Views of the construction of the onshore substation and the National Grid substation are largely screened primarily by intervening woodland at Grove Wood and Great Wood as well as smaller woodland coverts within the fields between the Sandlings Walk path and the onshore substation and National Grid substation construction area. Only the top of the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible beyond intervening woodland and hedgerows during construction and they would be substantially screened and visible only slightly within the background of any views. Although not located on the Sadling's Walk route, viewpoint 13 (<b>Figure 29.24</b>) provides a representative example of the likely change in views in the first half of this section of the Sandlings Walk.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Low to negligible
<ul style="list-style-type: none"> <li>The distance of this section of the Sandlings Walk between Sloe Lane (Billeaford Hall) and Aldringham Common from the onshore substation and the National Grid substation (2.0km from Billeaford Hall and 4.5km from Adringham), in combination with the presence of intervening woodland and hedgerows means that walkers will have no views or at most a negligible change to their views. Views of the operational onshore substation and National Grid substation are largely screened primarily by intervening woodland at Grove Wood and Great Wood as well as smaller woodland coverts within the fields between the Sandlings Walk path and the onshore substation and National Grid substation operational area. Only the top of the larger elements of electrical infrastructure, will be visible beyond intervening woodland and hedgerows during operation and they would be substantially screened and visible only slightly within the background of any views. Although not located on the Sandlings Walk route, viewpoint 13 (<b>Figure 29.24</b>) provides a representative example of the likely change in views in the first half of this section of the Sandlings Walk and illustrates the extent to which taller elements will be visible.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Low to negligible
Section D: Aldringham Common to Sizewell	

Walkers on Sandlings Walk			
Magnitude of change (construction):		Low to negligible (during construction period)	
<ul style="list-style-type: none"> <li>The distance of this section of the Sandlings Walk (&gt;4.5km) to the onshore substation and the National Grid substation as well as the presence of intervening woodland, hedgerows and settlements means that that will be no views or extremely limited views of the construction.</li> </ul>			
Magnitude of change (operation, first year of operational phase):		Low to negligible	
<ul style="list-style-type: none"> <li>The distance of this section of the Sandlings Walk (&gt;4.5km) to the onshore substation and the National Grid substation as well as the presence of intervening woodland, hedgerows and settlements means that that will be no views or extremely limited views during operation.</li> </ul>			
Magnitude of change (operation, 15 years post construction):		Low to negligible	
Section E: Sizewell to northern edge of study area south of East Bridge			
Magnitude of change (construction):		Negligible (during construction period)	
The distance of this section of the Sandlings Walk (between 4.6km and 6.8km) to the onshore substation and the National Grid substation as well as the presence of intervening woodland, hedgerows and the settlement of Leiston means that there will be no views of the construction.			
Magnitude of change (operation, first year of operational phase):		Negligible	
The distance of this section of the Sandlings Walk (between 4.6km and 6.8km) to the onshore substation and the National Grid substation as well as the presence of intervening woodland, hedgerows and the settlement of Leiston means that there will be no views during operation.			
Magnitude of change (operation, 15 years post construction):		Negligible	
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Walkers on Sandlings Walk (Section A)	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Walkers on Sandlings Walk (Section B)	Not Significant, short-term, temporary	Not Significant, long-term, temporary	Not significant, long-term, permanent
Walkers on Sandlings Walk (Section C)	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Walkers on Sandlings Walk (Section D)	Not Significant, short-term, temporary	Not Significant, long-term, temporary	Not significant, long-term, permanent
Walkers on Sandlings Walk (Section E)	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent

### 29.3.1.2 Onshore Cable Route (Operational Effects)

35. The potential effects of the onshore infrastructure during operation will relate principally to the presence of the onshore substation and National Grid substation. It is anticipated that once operational, the potential effects of the landfall and onshore cable route would be not significant due to their presence

underground, with a minimum amount of associated development visible above ground.

36. The assessment of these components during the operational phase has been scoped out of the LVIA, as agreed through the scoping process, with the exception of the removal of woodland at the Aldeburgh Road crossing (woodland north of Fitches Lane) which is assessed as an operational impact in **Table A29.11**.

**Table A29.11 Operational Visual Effects of Onshore Cable Route**

Receptor	Sensitivity to change	Magnitude of Change (operation, first year of operational phase)	Significance of effect (operation, first year of operational phase)	Magnitude of change (operation, 15 years post construction)	Significance of effect (operation, 15 years post construction)
Aldringham residents of local area around Aldeburgh Road and Fitches Lane	High	Medium. The visual amenity experienced by residents of the local area around Aldeburgh Road and Fitches Lane is likely to be changed, due to loss of woodland in local views, resulting in more open views (which are currently contained by the woodland). Woodland will be retained acting as screening between residential properties on Fitches Lane and the onshore cable route and also between the onshore cable route and Aldringham Court Nursing Home.	<b>Significant</b> , short-term and temporary	Low Land will be reinstated with heathland (directly above the onshore cables) and areas of woodland around the edges of the affected area, providing further screening (in addition to the retained woodland)	<b>Not significant</b> , long-term and permanent.

Receptor	Sensitivity to change	Magnitude of Change (operation, first year of operational phase)	Significance of effect (operation, first year of operational phase)	Magnitude of change (operation, 15 years post construction)	Significance of effect (operation, 15 years post construction)
B1122 (motorists)	Medium	Medium. The felling of woodland north of Fitches Lane will be visible in views from a short section of the B1122 Aldeburgh Road immediately passing woodland north of Fitches Lane, and will change the visual amenity experienced from the road, creating more open views which are currently enclosed on either side by mature woodland. Woodland will be retained which will reduce the width of felled area visible to a short section of the road.	<b>Significant</b> , short-term and temporary	Low Land will be reinstated with heathland (directly above the onshore cables) and areas of woodland around the edges of the affected area, providing further screening (in addition to the retained woodland)	<b>Not significant</b> , long-term and permanent.
Local public right of way (Fitches Lane / woodland north of Fitches Lane)	Medium-high	Medium. The visual amenity experienced by people walking on the local PRoW network along Fitches Lane and within the woodland north of Fitches Lane is likely to be changed, due to loss of woodland in local views,	<b>Significant</b> , short-term and temporary	Low Land will be reinstated with heathland (directly above the onshore cables) and areas of woodland around the edges of the affected area, providing further screening (in addition to the	<b>Not significant</b> , long-term and permanent.

Receptor	Sensitivity to change	Magnitude of Change (operation, first year of operational phase)	Significance of effect (operation, first year of operational phase)	Magnitude of change (operation, 15 years post construction)	Significance of effect (operation, 15 years post construction)
		resulting in more open views (which are currently contained by the woodland) Woodland will be retained acting as screening between residential properties on Fitches Lane and the onshore cable route.		retained woodland).	

### 29.3.2 Potential Impacts during Construction

#### 29.3.2.1 Onshore Cable Route

##### 29.3.2.1.1 Settlements

37. An assessment of the visual effects of the onshore cable route during the construction period on views experienced by residents of Leiston, Aldringham, Coldfair Green and Friston (east to west along onshore cable route) (**Figure 29.6**) is presented in the following technical assessment. The visual effects of the onshore cable route during the construction period have been assessed as not significant on all other settlement receptors in the preliminary assessment.

**Table A29.12 Visual Effects of Onshore Cable Route on Settlements**

Receptor	Sensitivity to change	Magnitude of Change (Construction)	Significance of effect (Construction)
Leiston (residents)	High	The magnitude of change on views experienced by residents of Leiston resulting from the construction of the onshore cable route is assessed as negligible from the majority of the settlement where there will be no direct views of the onshore infrastructure during construction, due to screening by the built environment and intervening vegetation within and around the edges of the Leiston. Views of the construction of the onshore cable route are limited to views experienced by residents of localised areas along the southern and eastern edge of Leiston, with open views of the fields to the south-east, such as from Red House Lane and Kingfisher Place, where residents are likely to experience a low	Not significant, short-term, temporary (during construction period). Construction stage visual effects will primarily be experienced by residents over several short 2-3 month duration periods of peak construction activity and not continuously throughout the construction phase (there will be times

Receptor	Sensitivity to change	Magnitude of Change (Construction)	Significance of effect (Construction)
		magnitude of change resulting from the construction of Section 2 of the onshore cable route during the construction period. The onshore cable route construction works will be set back in views, over 400m from the edge of Leiston at its closest point and is seen in the context of the National Grid overhead transmission line which traverses the landscape in existing views from this edge of Leiston.	when the relevant section of the onshore cable route is not being worked, yet has infrastructure that will not have been fully reinstated).
Aldringham (residents)	High	<p>The magnitude of change on views experienced by residents of Aldringham resulting from the construction of the onshore cable route (Section 2) is assessed as low on its route to the east of the settlement crossing the B1353 Thorpeness Road, where construction works will be set back from the settlement, over 250m from the edge of Aldringham at its closest point and not visible in views from the centre of Aldringham.</p> <p>The magnitude of change on views experienced by residents of Aldringham resulting from the construction of the onshore cable route, is however, assessed as rising to medium on views experienced from areas local to where the onshore cable route (Section 3) crosses the Hundred River and Aldringham Road, where the construction of the onshore cable route will be visible in views from nearby dwellings on Fitches Lane and Aldeburgh Road, and where the felling of an area of woodland north of Fitches Lane is required. The visual amenity experienced by residents of this localised area of Aldringham on Fitches Lane and Aldeburgh Road is likely to be changed due to the visible onshore cable route construction activity (including a period of fencing, woodland felling, topsoil strip and storage, and haul road construction; a period of trench construction, cable/duct installation and trench backfilling; and a period of jointing bay and in the event of ducting having been laid, cable installation). The felling of woodland north of Fitches Lane is likely to result in more open views on either side of the Aldeburgh Road (which are currently contained by woodland) in views experienced by local residents during the construction period.</p>	<p>Not significant, short-term, temporary (during construction period) from the majority of Aldringham.</p> <p>Significant, short-term and temporary from the Aldeburgh Road and Fitches Lane area where the onshore cable route construction requires felling of an area of woodland north of Fitches Lane. Construction stage visual effects will primarily be experienced by local residents over several separate short 2-3 month periods of peak construction activity and not continuously throughout the construction phase. Over the majority of the construction stage, the relevant section of the onshore cable route will not be subject to these key construction works and the onshore cable route will primarily be viewed as installed infrastructure and stripped topsoil to be reinstated, during which time the effects are considered not significant due to the limited construction activity.</p>

Receptor	Sensitivity to change	Magnitude of Change (Construction)	Significance of effect (Construction)
Coldfair Green (residents)	High	<p>The magnitude of change on views experienced by residents of Coldfair Green resulting from the construction of the onshore cable route is assessed as negligible from the majority of the settlement where there will be no direct views of the onshore infrastructure during construction, due to screening by the built environment and intervening vegetation within and around the edges of Coldfair Green. Knodishall Common provides substation screening in views west.</p> <p>The magnitude of change on views experienced by residents of the southern edge of Coldfair Green resulting from the construction of the onshore cable route, is assessed as low in views from a localised area where properties around The Fitches and Buxlow Close, which have rear elevations facing south towards Section 3 of the onshore cable route, at distances between 150-200m. These areas of the settlement benefit from screening in rear gardens and from the belt of woodland vegetation that runs along the southern edge of the settlement, however there may be some views of the onshore cable route construction from upper floors.</p> <p>A group of dwellings on Snape Road, located within 150m, are likely to be most exposed to the onshore cable route construction, where it crosses Sloe Lane and Snape Road, and then extends to the west of Snape Road to the onshore substation site, with the magnitude of change assessed as medium in views from this localised area near Snape Road. Visible onshore cable route construction works which are likely to result in change to views experienced from this localised area include a period of fencing, CCS and haul road construction/usage, and topsoil strip and storage; a period of trench construction, cable/duct installation and trench backfilling; and a period of jointing bay and (in the event of ducting having been laid) cable installation. HGV construction traffic is likely to be visible accessing the onshore substation site off Snape Road via the substation construction haul road during the construction phase.</p>	<p>Not significant, short-term, temporary (during construction period) from the majority of Coldfair Green.</p> <p>Significant, short-term and temporary from a small group of dwellings on Snape Road on the southern edge of Coldfair Green. Construction stage visual effects will primarily be experienced by local residents over several separate short 2-3 month periods of peak construction activity and not continuously throughout the construction phase. Over the majority of the construction stage, the relevant section of the onshore cable route will not be subject to these key construction works and the onshore cable route will primarily be viewed as installed infrastructure and stripped topsoil to be reinstated, however HGV construction traffic is likely to be visible accessing the onshore substation site off Snape Road via the substation construction haul road during the construction phase contributing to significant local visual effects.</p>
Friston (residents)	High	<p>The magnitude of change on views experienced by residents of Friston resulting from the construction of the onshore cable route is assessed as negligible from the majority of the central and southern areas of the settlement where there will be no direct views of the onshore infrastructure during construction, due to screening by the built</p>	<p>Not significant, short-term, temporary (during construction period) from the majority of central and southern areas of Friston.</p>

Receptor	Sensitivity to change	Magnitude of Change (Construction)	Significance of effect (Construction)
		<p>environment and intervening vegetation within and around the edges of the Friston.</p> <p>The magnitude of change on views experienced by residents of Friston resulting from the construction of the onshore cable route, is however, assessed as rising to medium in views from a localised area on the northern edge of the settlement, where the closest properties around Church Road/Grove Road are likely to have views of the onshore cable route construction (Section 4) at relatively short distances of 170-250m.</p> <p>Properties on Aldeburgh Road are also likely to have views of the onshore cable route construction to the fore of Grove Wood, although at longer distance (over 700m), and will experience a low magnitude of change.</p> <p>In both cases, visible onshore cable route construction works which are likely to result in change to views experienced, include a period of fencing, haul road construction/usage, and topsoil strip and storage; a period of trench construction, cable/duct installation and trench backfilling; and a period of jointing bay and (in the event of ducting having been laid) cable installation. Felling of short sections of hedgerow field boundaries to the north of Friston, including along Grove Road, is also required, although these are unlikely to be visible in views from within the village.</p>	<p>Significant, short-term and temporary from the northern edges of Friston around Church Road/Grove Road closest to the onshore cable route.</p> <p>Construction stage visual effects will primarily be experienced by local residents over several separate short 2-3 month periods of peak construction activity and not continuously throughout the construction phase.</p> <p>Over the majority of the construction stage, the relevant section of the onshore cable route will not be subject to these key construction works and the onshore cable route will primarily be viewed as installed infrastructure and stripped topsoil to be reinstated, however HGV construction traffic is likely to be visible accessing the onshore substation site off Snape Road via the substation construction haul road during the construction phase contributing to significant local visual effects.</p>

### 29.3.2.1.2 Transport Routes

38. An assessment of the visual effects of the onshore cable route during the construction period on views experienced by motorists from the B1353, B1122, B1069 and B1121 (east to west along the onshore cable route) (**Figure 29.6**) is presented in the following technical assessment. The visual effects of the onshore cable route during the construction period have been assessed as not significant on all other transport routes in the preliminary assessment.



**Table A29.13 Visual Effects of Onshore Cable Route on Transport Routes**

Receptor	Sensitivity to change	Magnitude of Change (Construction)	Significance of effect (Construction)
B1353 Thorpeness Road (motorists)	Medium	<p>Motorists on the B1353 between Thorpeness and Coldfair Green will generally have no views, or at most experience a negligible change to their views, due to the construction of the onshore cable route.</p> <p>Motorists will experience a medium magnitude of change to views only over a short 500m section of the B1353, to the east of Aldringham, where the onshore cable route (Section 2) crosses the B1353. Over this short section of the B1353 the onshore cable route construction works will be visible in close proximity and will consist of a period of fencing, CCS and haul road construction/usage, and topsoil strip and storage; a period of trench construction, cable/duct installation and trench backfilling; and a period of jointing bay and (in the event of ducting having been laid) cable installation. The felling of short sections of hedgerow field boundary along either side of the B1353 to allow for the construction of the onshore cable route will also be visible in views along this short section of the road. These changes to views experienced during the construction period occur to views of the approach to the AONB on the Thorpeness Road experienced by motorists on this section of the B1353.</p>	<p>Not significant, short-term, temporary (during construction period) on the B1353 Thorpeness Road as a whole, which will generally afford no views of the onshore cable route construction to motorists.</p> <p>Significant, short-term and temporary effect on views from a short (500m) section of the B1353 to the east of Aldringham where the onshore cable route crosses the road. Construction stage visual effects will primarily be experienced by local residents over several separate short 2-3 month periods of peak construction activity and not continuously throughout the construction phase. Over the majority of the construction stage, the relevant section of the onshore cable route will not be subject to these key construction works and the onshore cable route will primarily be viewed as installed infrastructure and stripped topsoil to be reinstated, during which time the effects are considered not significant due to the limited construction activity.</p>
B1122 Aldeburgh Road (motorists)	Medium	<p>Motorists on the B1122 between Aldeburgh and Leiston will generally have no views, or at most experience a negligible change to their views, due to the construction of the onshore cable route.</p> <p>Motorists will experience a medium magnitude of change to views only over a short 250m section of the B1122, to the south of Aldringham, where the onshore cable route (Section 3) crosses the B1122. Over this short section of the B1122 the onshore cable route construction works will be</p>	<p>Not significant, short-term, temporary (during construction period) on the B1122 Aldeburgh Road as a whole, which will generally afford no views of the onshore cable route construction to motorists.</p> <p>Significant, short-term and temporary on views from a short (250m) section of the B1122 to the south of Aldringham where the onshore cable route crosses the road and woodland north of Fitches Lane. Construction stage visual effects will primarily be experienced by local residents</p>

Receptor	Sensitivity to change	Magnitude of Change (Construction)	Significance of effect (Construction)
		<p>visible in close proximity and will consist of a period of fencing, haul road construction/usage, and topsoil strip and storage; a period of trench construction, cable/duct installation and trench backfilling; and a period of jointing bay and (in the event of ducting having been laid) cable installation. The felling of an area of woodland north of Fitches Lane, to the south of Aldringham Court, on either side of the B1122 to allow for the construction of the onshore cable route will also be visible in views along this section of the road and will change the visual amenity experienced from the road, creating more open views from this section that is currently enclosed on either side by mature woodland.</p>	<p>over several separate short 2-3 month periods of peak construction activity and not continuously throughout the construction phase. Over the majority of the construction stage, the relevant section of the onshore cable route will not be subject to these key construction works and the onshore cable route will primarily be viewed as installed infrastructure and stripped topsoil to be reinstated, during which time the effects are considered not significant due to the limited construction activity.</p>
B1069 Snape Road (motorists)	Medium	<p>Motorists on the B1069 between Leiston and Snape will generally have no views, or at most experience a negligible change to their views, due to the construction of the onshore cable route.</p> <p>Motorists will experience a medium magnitude of change to views only over a short 500m section of the B1069, to the south of Coldfair Green, where the onshore cable route crosses the B1069. Over this short section of the B1069 the onshore cable route construction works will be visible in close proximity and will consist of a period of fencing, CCS and haul road construction/usage, and topsoil strip and storage; a period of trench construction, cable/duct installation and trench backfilling; and a period of jointing bay and (in the event of ducting having been laid, cable installation). Vehicles/machinery in use temporarily during the construction period will be visible, including vehicles accessing the onshore substation site off Snape Road. The felling of short sections of hedgerow field boundary along either side of the B1069 to allow</p>	<p>Not significant, short-term, temporary (during construction period) on the B1069 Snape Road as a whole, which will generally afford no views of the onshore cable route construction to motorists.</p> <p>Significant, short-term and temporary from a short (500m) section of the B1069 to the south of Coldfair Green where the onshore cable route crosses the road. Construction stage visual effects will primarily be experienced by local residents over several separate short 2-3 month periods of peak construction activity and not continuously throughout the construction phase. Over the majority of the construction stage, the relevant section of the onshore cable route will not be subject to these key construction works and the onshore cable route will primarily be viewed as installed infrastructure and stripped topsoil to be reinstated, however HGV construction traffic is likely to be visible accessing the onshore substation site off Snape Road via the substation construction haul road during the</p>

Receptor	Sensitivity to change	Magnitude of Change (Construction)	Significance of effect (Construction)
		for the construction of the onshore cable route will also be visible in views along this section of the road.	construction phase contributing to significant local visual effects.
B1121 Aldeburgh / Saxmundham Road (motorists)	Medium	<p>Motorists on the B1121 between Saxmundham and Aldeburgh will generally have no views, or at most experience a negligible change to their views, due to the construction of the onshore cable route.</p> <p>Motorists will experience a low magnitude of change to views over a short section of the B1121, in the southern part of Friston, where there are likely to be views of the onshore cable route construction to the north-east of the road. Over this short section of the B1121 the onshore cable route construction works will be visible at distance across fields to the fore of Grove Wood and will consist of fencing, CCS and haul road construction/usage, and topsoil strip and storage; a period of trench construction, cable/duct installation and trench backfilling; and a period of jointing bay and (in the event of ducting having been laid) cable installation. HGV construction traffic is likely to be visible accessing the onshore substation site off Snape Road via the substation construction haul road during the construction phase.</p>	Not significant, short-term, temporary (during construction period) on views from B1121 Aldeburgh Road. Construction stage visual effects will primarily be experienced by local residents over several separate short 2-3 month periods of peak construction activity and not continuously throughout the construction phase. Over the majority of the construction stage, the relevant section of the onshore cable route will not be subject to these key construction works and the onshore cable route will primarily be viewed as installed infrastructure and stripped topsoil to be reinstated, during which time the effects are considered not significant due to the limited construction activity.

### 29.3.2.1.3 Recreational Routes

39. An assessment of the visual effects of the onshore cable route during the construction period on views experienced by people using the Suffolk Coastal Path, Sandlings Walk and Suffolk Coastal Cycle Route (Regional Route 42) (**Figure 29.6**) is presented in the following technical assessment. The visual effects of the onshore cable route during the construction period have been assessed as not significant on all other recreational routes in the preliminary assessment.

**Table A29.14 Visual Effects of Onshore Cable Route on Recreational Routes**

Receptor	Sensitivity to change	Magnitude of Change (Construction)	Significance of Effect (Construction)
Suffolk Coastal Path (walkers)	High	<p>Walkers on the Suffolk Coastal Path will generally have no views of the onshore cable route construction, or at most experience a negligible change to their views, due to the construction of the onshore cable route. The large majority of the Suffolk Coastal Path will afford no views of the onshore cable route construction to walkers and will remain unaffected.</p> <p>Walkers on the Suffolk Coastal Path will experience a high magnitude of change to views only over a short section of the route, to the north of Thorpeness, where the onshore cable route crosses or is close to the route of the Suffolk Coastal Path (within 500m). Over this short section of the Suffolk Coastal Path (approximately 1.8km) the onshore cable route construction works will be visible in close proximity and will consist of a period of fencing, haul road construction/usage, and topsoil strip and storage; a period of trench construction, cable/duct installation and trench backfilling; and a period of jointing bay and (in the event of ducting having been laid) cable installation. The clearance of some short sections of hedgerow field boundary to allow for the construction of the onshore cable route will also be visible in views along this section of the route.</p>	<p>Not significant, short-term, temporary (during construction period) from the Suffolk Coastal Path as a whole, which will generally afford no views of the onshore cable route construction to walkers.</p> <p>Significant, short-term and temporary from short (1.8km) section of the Suffolk Coastal Path to the north of Thorpeness where the onshore cable route crosses and is close to the route of the path such that the onshore cable route construction works will be visible intermittently, between sections with hedgerow/ woodland cover and more open sections.</p> <p>Construction stage visual effects will primarily be experienced by local residents over several separate short 2-3 month periods of peak construction activity and not continuously throughout the construction phase. Over the majority of the construction stage, the relevant section of the onshore cable route will not be subject to these key construction works and the onshore cable route will primarily be viewed as installed infrastructure and stripped topsoil to be reinstated, during which time the effects are considered not significant due to the limited construction activity.</p>
Sandlings Walk (walkers)	Medium-high	<p>Walkers on the Sandlings Walk will generally have no views, or at most experience a negligible change to their views, due to the construction of the onshore cable route. The large majority of the Sandlings Walk will afford no views of the onshore cable route construction to walkers and will remain unaffected.</p> <p>Walkers on the Sandlings Walk will experience a high magnitude of change to views over two short sections of the route:</p> <p>1) from the edge of Friston to Sloe Lane for approximately 2.2km where the route runs in close proximity to</p>	<p>Not significant, short-term, temporary (during construction period) from the Sandlings Walk as a whole, which will generally afford no views of the onshore cable route construction to walkers.</p> <p>Significant, short-term and temporary for two sections of the Sandlings Walk to the between Friston and Sloe Lane (2.2km) and between Aldringham Common and Sizewell (1.7km) where the onshore cable route crosses and runs in close proximity to the route of the path,</p>

Receptor	Sensitivity to change	Magnitude of Change (Construction)	Significance of Effect (Construction)
		<p>and subsequently crosses the onshore cable route; 2) from the edge of Aldringham Common to Sizewell, to the north of Thorpeness, for approximately 1.7km where the route crosses through and then runs parallel to the onshore cable route.</p> <p>In both cases the onshore cable route construction works will be visible in close proximity and will consist of a period of fencing, CCS and haul road construction/usage, and topsoil strip and storage; a period of trench construction, cable/duct installation and trench backfilling; and a period of jointing bay and (in the event of ducting having been laid) cable installation.</p> <p>The clearance of some short sections of hedgerow field boundaries to allow for the construction of the onshore cable route will also be visible in views along these two sections of the route.</p>	<p>such that the onshore cable route construction works will be visible intermittently, between sections with hedgerow/ woodland cover and more open sections. Construction stage visual effects will primarily be experienced by local residents over several separate short 2-3 month periods of peak construction activity and not continuously throughout the construction phase. Over the majority of the construction stage, the relevant section of the onshore cable route will not be subject to these key construction works and the onshore cable route will primarily be viewed as installed infrastructure and stripped topsoil to be reinstated, during which time the effects are considered not significant due to the limited construction activity.</p>
<p>Suffolk Coastal Cycle Route (Regional Route 42) (Cyclists)</p>	<p>Medium-high</p>	<p>Cyclists on the Suffolk Coastal Cycle Route will generally have no views, or at most experience a negligible change to their views, due to the construction of the onshore cable route. The large majority of the Suffolk Coastal Cycle Route will afford no views of the onshore cable route construction to walkers and will remain unaffected.</p> <p>Cyclists on the Suffolk Coastal Coastal Route will experience a high magnitude of change to views over a short section of the route, along Grove Road between Friston and Grove Wood, where the onshore cable route crosses or is close to the route of Suffolk Coastal Cycle Route. Over this short section of the Suffolk Coastal Cycle Route (approximately 500m) the onshore cable route construction works will be visible in close proximity and will consist of a period of fencing, haul road construction/usage, and topsoil strip and storage; a period of trench construction, cable/duct installation and trench backfilling; and a period of jointing bay and (in the event of ducting having been laid) cable installation. The clearance of some</p>	<p>Not significant, short-term, temporary (during construction period) from the Suffolk Coastal Cycle Route as a whole, which will generally afford no views of the onshore cable route construction to cyclists.</p> <p>Significant, short-term and temporary from short (500m) section of the Suffolk Coastal Cycle Route along Grove Road between Friston and Grove Wood where the onshore cable route is located in close proximity to the route.</p> <p>Construction stage visual effects will primarily be experienced by local residents over several separate short 2-3 month periods of peak construction activity and not continuously throughout the construction phase. Over the majority of the construction stage, the relevant section of the onshore cable route will not be subject to these key construction works and the onshore cable route will primarily be viewed as installed infrastructure and stripped topsoil to be reinstated, during</p>

Receptor	Sensitivity to change	Magnitude of Change (Construction)	Significance of Effect (Construction)
		short sections of hedgerow field boundary to allow for the construction of the onshore cable route will also be visible in views along this section of the route.	which time the effects are considered not significant due to the limited construction activity.

### 29.3.2.2 Landfall Location

#### 29.3.2.2.1 Settlements

40. An assessment of the visual effects of the landfall during the construction period on views experienced by residents of Thorpeness (**Figure 29.6**) is presented in the following technical assessment. The visual effects of the landfall during the construction period have been assessed as not significant on all other settlement receptors in the preliminary assessment in **section 29.2.3.3**.

**Table A29.15 Visual Effects of Landfall Location on Settlements**

Receptor	Sensitivity to change	Magnitude of Change (Construction)	Significance of Effect (Construction)
Thorpeness (residents)	High	<p>The magnitude of change on views experienced by residents of Thorpeness resulting from the construction of the landfall is assessed as negligible from the majority of the central and southern areas of the settlement where there will be no direct views of the landfall during construction, due to orientation of the headland at Thorpeness, screening by the built environment, intervening vegetation within and around the edges of the Thorpeness.</p> <p>The magnitude of change on views experienced by residents of Thorpeness resulting from the construction of the onshore cable route, is assessed as low in views from a localised area on the northern and north-western edge of the settlement, where properties around North End Avenue, Pilgrim's Way, Thorpeness Road and Stony Lane may have some indirect views north towards the landfall construction works, but on the whole, are either screened by intervening vegetation on Thorpeness Common or have views orientated in a different direction towards the sea to the east.</p>	Not significant, short-term, temporary (during construction period).

#### 29.3.2.2.2 Transport Routes

41. An assessment of the visual effects of the landfall during the construction period on views experienced by motorists travelling on the B1353 (**Figure 29.6**) is presented in the following technical assessment. The visual effects of the landfall during the construction period have been assessed as not significant on all other transport routes in the preliminary assessment in **section 29.2.3.3**.

**Table A29.16 Visual effects of Landfall Location on Transport Routes**

Receptor	Sensitivity to change	Magnitude of Change (Construction)	Significance of Effect (Construction)
B1353 (motorists)	Medium	<p>Motorists on the B1353 between Thorpeness and Coldfair Green will generally have no views, or at most experience a negligible change to their views, due to the construction of the landfall.</p> <p>Motorists will experience a low magnitude of change to views over a short section of the B1353, to the west of Thorpeness, where the landfall is located to the north of the B1353. Over this short section of the B1353 (approximately 750m) the landfall construction works may in part be visible to the north of the road, however there is notable hedgerow foreground screening along the B1353 and the landfall CCS is set back from the road behind a further hedgerow field boundary along intervening fields which will reduce visibility of the landfall construction works.</p>	Not significant, short-term, temporary (during construction period).

#### 29.3.2.2.3 Recreational Routes

42. An assessment of the visual effects of the landfall during the construction period on views experienced by people using the Suffolk Coastal Path and Sandlings Walk (**Figure 29.6**) is presented in the following technical assessment. The visual effects of the landfall during the construction period have been assessed as not significant on all other recreational routes receptors in the preliminary assessment in **section 29.2.3.3**.

**Table A29.17 Visual Effects of Landfall on Recreational Routes**

Receptor	Sensitivity to change	Magnitude of Change (Construction)	Significance of Effect (Construction)
Suffolk Coastal Path (walkers)	High	<p>Walkers on the Suffolk Coastal Path will generally have no views, or at most experience a negligible change to their views, due to the construction of the landfall.</p> <p>Walkers on the Suffolk Coastal Path will experience a high magnitude of change to views over a short section of the route, to the north of Thorpeness, where the route of the path passes the landfall. Over this short section of the Suffolk Coastal Path (approximately 1.0km) the landfall construction works will be visible in close proximity and will consist of construction consolidation sites, installation of HDD compound and two transition bays within the landfall and vehicles/machinery in use temporarily, during the construction period. The clearance of some sections of scrub vegetation and hedgerow field boundary to allow for the construction of the landfall is also likely to be visible in views along this section of the route.</p>	<p>Not significant, short-term, temporary (during construction period) from the majority of the Suffolk Coastal Path.</p> <p>Significant, short-term and temporary from short (1.0km) section of the Suffolk Coastal Path to the north of Thorpeness where the route of the path passes the landfall.</p>

Receptor	Sensitivity to change	Magnitude of Change (Construction)	Significance of Effect (Construction)
Sandlings Walk (walkers)	Medium-high	<p>Walkers on the Sandlings Walk will generally have no views, or at most experience a negligible change to their views, due to the construction of the landfall.</p> <p>Walkers on the Sandlings Walk will experience a medium magnitude of change to views over a short section of the route, between Thorpeness and Sizewell, where the route overlooks the landfall. Over this short section of the Sandlings Walk (approximately 1.0km) the landfall construction works will be visible in close proximity and will consist of construction consolidation sites, installation of HDD compound and two transition bays within the landfall and vehicles/machinery in use temporarily, during the construction period. The clearance of some sections of scrub vegetation and hedgerow field boundary to allow for the construction of the landfall is also likely to be visible in views along this section of the route.</p>	<p>Not significant, short-term, temporary (during construction period) from the majority of the Sandlings Walk.</p> <p>Significant, short-term and temporary for a short (1.0km) section of the Sandlings Walk between Thorpeness and Sizewell where the route of the path overlooks the landfall.</p>

## 29.4 Technical Assessment (Alternate Onshore Substation Location)

### 29.4.1 Potential Impacts during Construction and Operation

43. The detailed technical assessment of the visual effects of the proposed East Anglia ONE North project onshore infrastructure set out in **section 29.3** is based upon the assumption that the proposed East Anglia ONE North project will use the intended onshore substation location.
44. This section provides a detailed technical assessment of the visual effects of the proposed East Anglia ONE North project onshore infrastructure in the eventuality that the proposed East Anglia ONE North project uses the alternative substation location, as allowed for in the draft DCO.
45. As this assessment is relates to the onshore substation, the technical assessment which follows considers the visual effects of each of the onshore substation and National Grid substation only. Visual effects at onshore cable route and landfall receptors will be the same regardless of which onshore substation footprint is used by the proposed East Anglia ONE North project.

#### 29.4.1.1 Onshore Substation and National Grid Substation

46. This assessment of the visual effects of the onshore substation and National Grid substation uses the same agreed representative viewpoints as those in **section 29.3 (Figure 29.4)**.



29.4.1.1.1 Viewpoint Assessment

**Viewpoint 1 Public Right of Way near Friston House**

Viewpoint 1 Public Right of Way near Friston House				
Designations:	None	Grid reference:	E: 641169	N: 260794
LCT:	Estate Sandlands (7)	View direction:	28°	
		Distance to the onshore substation:	0.4km	
Receptors:	Viewpoint is representative of views experienced by people walking on the PRow along the eastern boundary of the grounds of Friston House and residents of dwellings on lane extending to Woodside Farm.			
Baseline description (existing view is shown in <b>Figure 29.13a</b> ):				
<ul style="list-style-type: none"> <li>Open view across medium to large scale, arable agricultural fields, enclosed by hedgerows and scattered hedgerow trees, in a regular pattern with straight boundaries. Clipped hedgerows, regular pattern and arable use of fields create the impression of a well maintained/managed landscape.</li> <li>The landscape is well wooded, with a large stand of ancient, semi-natural woodland at Grove Wood and the adjoining woodland of Laurel Covert forming the backdrop and providing enclosure of the view. Other smaller stands of woodland and thicker areas of hedgerow combine to provide further wooded cover.</li> <li>The landform is a gently undulating plateau, rising gradually to the north.</li> <li>The skyline of the view is traversed by the National Grid high voltage overhead transmission line and double row of electrical pylons, with electrical lines strung across the skyline of the view.</li> <li>The composition of the view is relatively simple, consisting mainly of agricultural fields, woodland and sky, although it is interrupted by the tall vertical pylons behind the wooded backdrop.</li> <li>There is relatively little built development visible, with just Moor Farm (Fristonmoor) forming a focal point on the skyline. Its vernacular building style of dark weatherboard and red-tiled roof are distinctive.</li> </ul>				
Sensitivity to change: <i>Combination of the value of the view and the susceptibility of each visual receptor</i>				
Value:	Medium			
<ul style="list-style-type: none"> <li>The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.</li> <li>It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.</li> <li>The view is incidental to the walk along the PRow, which forms part of a wider loop and network of PRow that are likely to be used by a moderate number of people locally. The rural setting and views from this PRow network are likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character.</li> <li>The view displays traditional rural qualities and some scenic interest arising from the interaction of the arable agricultural fields in the setting of a large areas of semi-natural, ancient woodland, while also being influenced by the high voltage overhead transmission line traversing the skyline.</li> </ul>				
Receptor	Susceptibility to change	Sensitivity to change		
People walking on PRow near Friston House:	Medium-high	Medium-high		
Residents of dwellings on lane to Woodside Farm:	High	High		
Magnitude of change:				
Geographic extent:	Short distance/local extent			
The onshore substation will be visible at short distance and local extent, located at a distance of approximately 0.4km and is located to the north-east of the viewpoint. The National Grid substation is				

Viewpoint 1 Public Right of Way near Friston House	
located 0.35km from the viewpoint. The view of the onshore substation is representative of views from a localised area on the northern edge of Friston near Friston House.	
Magnitude of change (construction):	High (during construction period)
<ul style="list-style-type: none"> <li>The construction of the onshore substation, National Grid substation, access road and onshore cable route will be visible in close proximity, in the foreground of the view.</li> <li>The construction of the onshore infrastructure will result in a large-scale change in the view, due to the size, extent and close proximity of the onshore substation, National Grid substation and construction compounds, together with fencing, access road, vehicles, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period, which come closer to the viewpoint than the onshore substation.</li> <li>During the construction period, the built form of the onshore substation and National Grid substation will take shape during the construction and installation of the substation platforms, GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc). With progress through the construction period, the built forms of the constructed infrastructure will increase the influence of large buildings and infrastructure, such that electrical infrastructure becomes the prevailing feature of the view.</li> <li>During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons. The installation of sealing end compounds will also be partially visible, allowing the existing 400kV overhead electrical lines to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the National Grid substation.</li> <li>The temporary diversion of the circuit by temporary masts is also likely to be partially visible from this viewpoint during the construction period.</li> <li>The construction of the onshore infrastructure will result in some changes in ground profiles within and immediately around the onshore substation and National Grid substation. The construction of the SUDs basin and bunded landform will be visible in the immediate foreground of the view.</li> <li>Physical loss of hedgerows will be visible in the onshore construction corridor and National Grid substation.</li> <li>Task and vehicle lighting may be used in the hours of darkness during approved working hours.</li> </ul>	
Magnitude of change (operation, first year of operational phase): <b>(Figure 29.13b)</b>	High
<ul style="list-style-type: none"> <li>The operational onshore substation, National Grid substation and access road will be visible in close proximity, in the mid-ground of the view, although the National Grid substation will largely be screened by the intervening bunded landform around the SUDs basins which will form the foreground.</li> <li>The operation of the onshore infrastructure will result in a large-scale change in the view, due to the size, extent and close proximity of the onshore substation, National Grid substation, together with fencing and operation and maintenance (O&amp;M) vehicles during the operational period.</li> <li>During the operational period, the complex built form of the onshore substation and National Grid substation, including GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc) will be the prevailing feature of the view.</li> <li>The onshore substation will be viewed in the landscape context of the adjacent high-voltage transmission line. National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of two new pylons and the modification or replacement of another pylon, and the diversion the northern overhead line route, resulting in an overall increase of one additional pylon from the total number of pylons visible on the current route.</li> </ul>	

### Viewpoint 1 Public Right of Way near Friston House

- The sealing end compounds will also be partially visible, allowing the existing 400kV overhead electrical conductors (wires) to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the National Grid substation.
- The onshore infrastructure will have resulted in some changes in ground profiles within and immediately around the onshore substation and National Grid substation. The bunded landform around the SUDs basin will form the immediate foreground of the view and provides notable screening of the onshore substation and National Grid substation in this view.
- Recently planted woodland trees in tree tubes/guards planted during the construction period will occupy much of the foreground of the view around the bunded landform of the SUDs basin, but will have limited influence as landscape components/screening features until at least 5 years post-planting.
- The onshore substation and National Grid substation will be viewed against the backdrop of semi-natural ancient woodland, which provides some mitigation though its visual containment and its natural appearance, which offsets the technological appearance of the onshore substation.
- Lighting of the onshore substation will be visible at night, but this is assumed to be passive lighting (passive infra-red) and the onshore substation will not be permanently lit at night.
- The magnitude of change resulting from the onshore substation and National Grid substation will reduce when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.

Magnitude of change (operation, 15 years post construction): (**Figure 29.13c**)

Negligible

- Mitigation woodland planting between the viewpoint and the onshore substation around the bunded landform of the SUDS basin will be located in the immediate foreground of the view and is predicted to entirely screen the view of the onshore substation and National Grid substation. Mitigation woodland planting which will be in the immediate foreground of the view (directly in front of the viewpoint) is shown in the photomontage in **Figure 29.13c**, to provide an illustration of the landscape mitigation planting around the onshore substation site.
- Mitigation planting will reduce the magnitude of change to negligible after approximately 15 years post-construction, when the woodland planting is predicted to have grown to provide screening of the onshore substation and National Grid substation in the view.

#### Significance of effect:

Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
People walking on PRow near Friston House:	Significant, short-term, temporary	Significant, long-term, temporary	Not significant, long-term, permanent
Residents of dwellings on lane to Woodside Farm:	Significant, short-term, temporary	Significant, long-term, temporary	Not significant, long-term, permanent

### Viewpoint 2 Friston, Church Road

#### Viewpoint 2 Friston, Church Road

Designations:	None	Grid reference:	E: 641319	N: 260543
LCT:	Estate Sandlands (7)	View direction:	6°	
		Distance to the onshore substation:	0.54km	

Viewpoint 2 Friston, Church Road		
Receptors:	Viewpoint is representative of views experienced by people walking on the PRow that leads north out of Friston and to residents of Friston, particularly dwellings along Church Road and the lane that extends north to Woodside Farm.	
Baseline description (existing view is shown in <b>Figure 12.14a</b> ):		
<ul style="list-style-type: none"> <li>• Distinctively rural setting with perceived timeless quality of rural elements, interrupted only by the modern overhead pylons on the skyline. Juxtaposition of strongly rural landscape elements/character in the foreground with the modern influence of energy transmission in the backdrop.</li> <li>• Small scale field pattern of plots on the northern edge of Friston, informally enclosed by post and wire fences, giving way to more formal, regular and well-maintained hedgerow field boundaries.</li> <li>• Large area of semi-natural ancient at Grove Wood, together with the adjoining Laurel Covert woodland, forms the backdrop and encloses the view, creating the impression of a well-wooded landscape, reinforced by scattered, mature, deciduous trees and shelterbelt blocks.</li> <li>• Undulating landform, rising gradually to the north out of Friston, which provides some localised enclosure in the landscape.</li> <li>• The skyline of the view is traversed by the National Grid high voltage overhead transmission line and double row of electrical pylons, with electrical lines strung across the skyline of the view.</li> <li>• There is relatively little built development visible, with dwellings on the edge of Friston and Moor Farm (Fristonmoor) forming a focal point on the skyline. The vernacular building style of dark weatherboard and red-tiled rooves is distinctive.</li> </ul>		
Sensitivity to change: <i>Combination of the value of the view and the susceptibility of each visual receptor</i>		
Value:	Medium	
<ul style="list-style-type: none"> <li>• The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.</li> <li>• It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.</li> <li>• The view is representative of the view experienced by residents on the northern edges of Friston, particularly dwellings along Church Road and the lane that extends north to Woodside Farm. The view is specific to these areas and to a relatively limited number of people, however the rural setting of the view is likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character and setting of their place of residence.</li> <li>• The view displays traditional rural qualities and scenic interest arising from the strongly rural landscape character and setting of the ancient woodland, which provide a timeless quality, interrupted only by their interaction with more recent high voltage overhead transmission line development traversing the skyline.</li> </ul>		
Receptor	Susceptibility change	Sensitivity to change
People walking on the PRow that leads north out of Friston:	Medium-high	Medium-high
Residents of Friston (Church Road area):	High	High
Magnitude of change:		
Geographic extent:	Short distance/local extent	
The onshore substation will be visible at short distance and local extent, located at a distance of approximately 0.54km and is located to the north of the viewpoint. The National Grid substation is located 0.6km from the viewpoint. The view of the onshore substation is representative of views from a localised area on the northern edge of Friston near Church Road.		
Magnitude of change (construction):	Medium-high (during construction period)	
<ul style="list-style-type: none"> <li>• The construction of the onshore substation, National Grid substation and access road will be visible in close proximity, in the mid-ground of the view and will be partially screened by layers of</li> </ul>		

**Viewpoint 2 Friston, Church Road**

intervening hedgerows and mature field boundary trees. Construction of the onshore cable route is unlikely to be visible due to the intervening screening by hedgerows.

- Although there is considerable intervening screening, which breaks up the view of the onshore substation, the construction of the onshore substation and National Grid substation will result in a medium-large scale change in the view, due to their size, extent and proximity, together with the additional influence of fencing, the access road, vehicles, accommodation, machinery and cranes needed during the construction period.
- During the construction period, the built form of the onshore substation and National Grid substation will take shape during the construction and installation of the substation platforms, GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc). With progress through the construction period, the built forms of the constructed infrastructure will increase the influence of large buildings and infrastructure, such that electrical infrastructure will become a prominent influence on the view, set behind and partially screened by intervening hedgerows and mature trees.
- During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons. The installation of sealing end compounds will also be partially visible, allowing the existing 400kV overhead electrical lines to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the National Grid substation.
- The temporary diversion of the circuit by temporary masts is also likely to be partially visible from this viewpoint during the construction period.
- Changes in ground profiles within and immediately around the onshore substation and National Grid substation will be difficult to see in the view due to the amount of foreground screening. The construction of the SUDs basin will be visible to the left of the view.
- Task and vehicle lighting may be used in the hours of darkness during approved working hours.

Magnitude of change (operation, first year of operational phase): <b>(Figure 29.14b)</b>	Medium-high
---	-------------

- The operational onshore substation, National Grid substation and access road will be visible in close proximity, in the mid-ground of the view.
- The operation of the onshore infrastructure will result in a medium-high change in the view, due to the size, extent and close proximity of the onshore substation, National Grid substation, together with fencing, access road and operation and maintenance (O&M) vehicles during the operational period.
- During the operational period, the complex built form of the onshore substation and National Grid substation, including GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc) will become a prominent influence on the view, set behind and partially screened by intervening hedgerows and mature trees.
- The onshore substation will be viewed in the landscape context of the adjacent high-voltage transmission line. National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons.
- The sealing end compounds will also be partially visible, allowing the existing 400kV overhead electrical conductors (wires) to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the National Grid substation.
- The onshore infrastructure will have resulted in some changes in ground profiles within and immediately around the onshore substation and National Grid substation, however these changes will be difficult to see in the view due to the amount of foreground screening. The SUDs basin will be visible to the left of the view.

Viewpoint 2 Friston, Church Road			
<ul style="list-style-type: none"> <li>Woodland and hedgerows planted during pre-construction will be present in the view towards the onshore substation (as per the landscape plan in <b>Figure 29.11a-b</b> and <b>Figure 29.12</b>) and help add to the layers of screening between the viewpoint and the onshore substations.</li> <li>The onshore substation and National Grid substation will be viewed behind intervening hedgerows, new woodland planting and against the backdrop of semi-natural ancient woodland, which provides some mitigation though its visual containment and its natural appearance, which offsets the technological appearance of the onshore substation. The built form of the onshore substation and National Grid substation will also be lower in height than this woodland at Grove Wood/Laurel Covert.</li> <li>Lighting of the substations will be visible at times, but this is assumed to be passive lighting (passive infra-red) and the onshore substations will not be permanently lit.</li> <li>The magnitude of change resulting from the onshore substation and National Grid substation will reduce when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.</li> </ul>			
Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.14c</b> )		Medium	
<ul style="list-style-type: none"> <li>The operational onshore substation, National Grid substation and access road will be partially visible in the mid-ground of the view, but are increasingly screened by layers of re-instated hedgerows, individual field boundary trees and woodland (as per the landscape plan in <b>Figure 29.11</b>).</li> <li>It will mainly be the upper parts of the taller infrastructure and buildings within the onshore substation that will be visible, beyond and above the intervening woodland and hedgerows, with the lower infrastructure and ground level features entirely screened.</li> <li>The National Grid substation is largely screened behind layers of hedgerows and woodland areas, with just the tops of the gantries visible near the overhead pylons. The sealing end compounds will not be visible in the view.</li> <li>Hedgerows will combine with woodland planting areas to integrate the substations into the landscape, providing both screening and an extension of elements that are characteristic in the local landscape.</li> <li>Although it will result in a more wooded setting to the north of Friston, with the maturing woodland, the open agricultural setting of the village has been retained in the view, with screening achieved through multiple lines of planting, with a mix of blocks, belts, tree lines and reinstated hedges.</li> <li>The onshore substation will be viewed in the landscape context of the adjacent high-voltage transmission line. National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of two new pylons and the modification or replacement of another pylon, and the diversion the northern overhead line route, resulting in an overall increase of one additional pylon from the total number of pylons visible on the current route.</li> </ul>			
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
People walking on the PRow that leads north out of Friston:	Significant, short-term, temporary	Significant, long-term, temporary	Significant, long-term, permanent
Residents of Friston (Church Road area):	Significant, short-term, temporary	Significant, long-term, temporary	Significant, long-term, permanent

## Viewpoint 4 Friston, Grove Road

Viewpoint 4 Friston, Grove Road				
Designations:	None	Grid reference:	E: 641498	N: 260531
LCT:	Estate Sandlands (7)	View direction:	350°	
		Distance to the onshore substation:	0.54km	
Receptors:	Viewpoint is representative of views experienced by residents of Friston, particularly on Grove Road, motorists and cyclists heading north on Grove Road out of Friston and people walking on the PRoW which extends east out of Friston and joins the Sandlings Walk.			
Baseline description (existing view is shown in <b>Figure 29.16</b> ):				
<ul style="list-style-type: none"> <li>• Open view from the edge of Friston on Grove Road, with the open view extending east across large-scale arable fields.</li> <li>• View has a variety of landscape elements, at the juxtaposition between the urban/residential edge of Friston, with the rural character of the adjacent arable fields and setting of the semi-natural ancient woodland at Grove Wood.</li> <li>• Grove Road crosses the view, extending north where it becomes contained by hedgerow field boundaries.</li> <li>• Maintained gardens, clipped hedgerows, regular pattern and arable use of fields generally creates the impression of a well maintained/managed landscape, however there are elements in poorer condition.</li> <li>• The landscape is well wooded, with a large stand of ancient semi-natural woodland at Grove Wood forming the backdrop and providing enclosure of the view north. Other smaller stands of woodland, individual mature trees and thicker areas of hedgerow combine to provide further wooded cover.</li> <li>• The landform is a gently undulating plateau, rising only gradually to the north.</li> <li>• There are two pylons visible on the skyline of the view, but the majority of the National Grid overhead transmission line is not visible.</li> </ul>				
Sensitivity to change: <i>Combination of the value of the view and the susceptibility of each visual receptor</i>				
Value:	Medium			
<ul style="list-style-type: none"> <li>• The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.</li> <li>• It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.</li> <li>• The view is representative of the view experienced by residents on the northern edges of Friston, particularly dwellings along Grove Road and is incidental to the arrival into Friston on the PRoW and while driving north out of Friston on Grove Road. The view is specific to these areas and to a relatively limited number of people, however the rural setting of the view is likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character and setting of their place of residence.</li> <li>• The view displays traditional rural qualities and some scenic interest arising from the interaction of the arable agricultural fields in the setting of a large areas of semi-natural ancient woodland, while also being influenced by the electrical pylons on the skyline and urban edge features.</li> </ul>				
Receptor	Susceptibility	to	Sensitivity to change	
Residents of Friston, particularly on Grove Road:	High		High	
Motorists driving north on Grove Road out of Friston:	Medium		Medium	
People walking on the PRoW extending east out of Friston:	Medium-high		Medium-high	

Viewpoint 4 Friston, Grove Road		
Cyclists heading north on Grove Road out of Friston:	Medium-high	Medium-high
Magnitude of change:		
Geographic extent:	Short distance/local extent	
<p>The onshore substation will be visible at short distance and local extent, located at a distance of approximately 0.54km and is located to the north of the viewpoint. The National Grid substation is located 0.67km from the viewpoint. The view of the onshore substation is representative of views from a localised area on the northern edge of Friston near Grove Road.</p>		
Magnitude of change (construction):	Medium (during construction period)	
<ul style="list-style-type: none"> <li>The construction of the onshore substation and National Grid substation will be partially visible in close proximity, in the mid-ground of the view but will be substantially screened by layers of intervening hedgerows and field boundary trees. The onshore cable route construction works will be visible crossing the arable field in the foreground of the view.</li> <li>The construction of the onshore substation, National Grid substation and onshore cable route will result in a medium-large scale change in the view, due to the size, extent and proximity of the onshore cable route construction works, together with the onshore substation and National Grid substation, together with fencing, access roads, vehicles, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period.</li> <li>During the construction period, the built form of the onshore substation and National Grid substation will take shape during the construction and installation of the substation platforms, GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc). With progress through the construction period, the built forms of the constructed infrastructure will increase the influence of large buildings and infrastructure, such that electrical infrastructure will become an apparent influence on the view, behind and partially screened by intervening hedgerows and mature trees.</li> <li>During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons. The installation of sealing end compounds will not be visible due to intervening screening.</li> <li>The construction of the onshore infrastructure will result in some changes in ground profiles within and immediately around the onshore substation and National Grid substation, however these changes will not be seen in the view due to the amount of foreground screening.</li> <li>Task and vehicle lighting may be used in the hours of darkness during approved working hours.</li> </ul>		
Magnitude of change (operation, first year of operational phase): <b>(Figure 29.16b)</b>	Medium-low	
<ul style="list-style-type: none"> <li>The operational onshore substation and National Grid substation will be partially visible in close proximity, in the mid-ground of the view. The (underground) onshore cable route will have no visual influence post-restoration, therefore the magnitude of change resulting from the onshore infrastructure will reduce.</li> <li>The operation of the onshore infrastructure will result in a medium-low change in the view, due to level of intervening screening which reduces the visual influence of the onshore substation and National Grid substation in the view.</li> <li>During the operational period, the complex built form of the onshore substation and National Grid substation, including GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc) will become a slightly apparent influence on the view, set behind and notably screened by intervening hedgerows and mature trees.</li> <li>National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing</li> </ul>		



**Viewpoint 4 Friston, Grove Road**

overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons.

- The onshore infrastructure will have resulted in some changes in ground profiles within and immediately around the onshore substation and National Grid substation, however these changes will not be visible in the view due to the amount of foreground screening.
- Woodland and hedgerows planted during construction will be present in the view towards the onshore substation (as per the landscape plan in **Figure 29.11a-b and Figure 29.12**), including in the foreground of the view, but will have limited influence as landscape components/screening features until at least 5 years post-planting.
- The onshore substation and National Grid substation will be viewed behind intervening hedgerows, new woodland planting and against the backdrop of semi-natural ancient woodland, which provides some mitigation through its visual containment and its natural appearance, which offsets the technological appearance of the onshore substation. The built form of the onshore substation and National Grid substation will also be lower in height than this woodland at Grove Wood/Laurel Covert.
- Lighting of the substations will be visible at times, but this is assumed to be passive lighting (passive infra-red) and the onshore substations will not be permanently lit.
- The magnitude of change resulting from the onshore substation and National Grid substation will reduce when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.

Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.16c</b> )	Low
---	-----

- The operational onshore substation will be partially visible in the mid-ground of the view but is increasingly screened by layers of re-instated hedgerows, individual field boundary trees and woodland (as per the landscape plan in **Figure 29.11a-b and Figure 29.12**). Maturing woodland alongside Grove Road in particular will provide screening of the onshore substation in the view along Grove Road.
- It will mainly be the upper parts of the taller infrastructure and buildings within the onshore substation that will be visible, beyond and above the intervening woodland and hedgerows, with the lower infrastructure and ground level features entirely screened.
- The hedgerow reinstated alongside Grove Road in the immediate foreground will also provide an additional layer of screening in the view, in particular providing further screening of the National Grid substation such that is largely not visible in the view, apart from the tops of the taller gantries.
- National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons.

**Significance of effect:**

Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Residents of Friston, particularly on Grove Road:	Significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Motorists driving north on Grove Road out of Friston:	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
People walking on the PRow extending east out of Friston:	Significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent

Viewpoint 4 Friston, Grove Road			
Cyclists heading north on Grove Road out of Friston:	Significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent

### Viewpoint 5 Public Right of Way, near Moor Farm

Viewpoint 5 Public Right of Way, near Moor Farm				
Designations:	None	Grid reference:	E: 640884	N: 261654
LCT:	Ancient Estate Claylands (1)	View direction:	132°	
		Distance to the onshore substation:	0.65km	
Receptors:	Viewpoint is representative of views experienced by people walking on the PRow near Moor Farm (Fristonmoor) and residents of Moor Farm.			
Baseline description (existing view is shown in <b>Figure 29.17a</b> ):				
<ul style="list-style-type: none"> <li>Open view from relatively elevated position on the plateau landform to the north of the onshore substation, which affords open aspect south across arable land, overhead lines and the village of Friston.</li> <li>Although the view is fundamentally rural in character, it is dominated by the National Grid high voltage overhead transmission line and double row of electrical pylons, with electrical lines strung across the view.</li> <li>Telegraph poles also traverse the view and add to the 'wirescape' visible.</li> <li>Large-scale arable agricultural fields with relatively limited enclosure of foreground fields, giving way to field with hedgerow field boundaries in the middle distance that are partially degraded by hedgerow removal to improve agricultural production.</li> <li>Large area of semi-natural, ancient woodland at Grove Wood, together with the adjoining Laurel Covert woodland, forms the backdrop and encloses the view to the south-east. Woodlands at Friston House provide enclosure to Friston village. The combination of these larger woodland blocks with smaller stands of trees and hedgerows creates the impression of a well-wooded landscape.</li> <li>Housing within the village of Friston is visible to the south, with Friston church tower and a small wind turbine providing focal points.</li> </ul>				
Sensitivity to change: <i>Combination of the value of the view and the susceptibility of each visual receptor</i>				
Value:	Medium			
<ul style="list-style-type: none"> <li>The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.</li> <li>It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.</li> <li>The view is incidental to the walk along the PRow, which forms part of a wider loop and network of PRow that are likely to be used by a moderate number of people locally. The rural setting and views from this PRow network and from Moor House (Fristonmoor) are likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character and setting of their place of residence.</li> <li>The view displays some traditional rural qualities and some scenic interest arising from the interaction of the arable agricultural fields, in the setting of a large areas of semi-natural, ancient woodland, while also being strongly influenced by the high voltage overhead transmission line traversing the view.</li> </ul>				
Receptor	Susceptibility to change	to	Sensitivity to change	

Viewpoint 5 Public Right of Way, near Moor Farm		
People walking on the PRoW near Moor Farm (Fristonmoor):	Medium-high	Medium-high
Residents of Moor Farm (Fristonmoor):	High	High
Magnitude of change:		
Geographic extent:	Short distance/local extent	
The onshore substation will be visible at short distance and local extent, located at a distance of approximately 0.65km to the south of the viewpoint. The National Grid substation is located 0.47km from the viewpoint. The view of the onshore substation is representative of views from a localised area around Fristonmoor, to the immediate north of the onshore substation.		
Magnitude of change (construction):	High (during construction period)	
<ul style="list-style-type: none"> <li>The construction of the onshore substation, National Grid substation and access road will be visible in close proximity, in the mid-ground of the view. The National Grid substation will be located closest to the viewpoint and will form the most prominent element, to the fore of the East Anglia ONE North onshore substation.</li> <li>The construction of these onshore infrastructure will result in a large-scale change in the view, due to the size, extent and close proximity of the onshore substation, National Grid substation and construction compounds, together with fencing, access road, vehicles, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period.</li> <li>During the construction period, the built form of the onshore substation and National Grid substation will take shape during the construction and installation of the substation platforms, GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc). With progress through the construction period, the built forms of the constructed infrastructure will increase the influence of large buildings and infrastructure, such that electrical infrastructure becomes the prevailing feature of the view.</li> <li>The scale of the onshore substation and National Grid substation is subsumed below the vertical scale of the electrical pylons but is stark in comparison to the smaller scale of the housing and church in Friston.</li> <li>During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons, bringing the National Grid overhead line/pylons closer to viewpoint and appearing larger in scale in the view.</li> <li>The installation of sealing end compounds will also be visible allowing the existing 400kV overhead electrical conductors (wires) to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the National Grid substation.</li> <li>The construction of the onshore infrastructure will result in some changes in ground profiles within and immediately around the onshore substation and National Grid substation. The construction of the SUDs basin will be visible in the right of the view.</li> <li>The physical loss of the single hedgerow within the National Grid substation and the edge of Laurel Covert woodland will be seen in the view during construction.</li> <li>Task and vehicle lighting may be used in the hours of darkness during approved working hours.</li> </ul>		
Magnitude of change (operation, first year of operational phase): <b>(Figure 29.17b)</b>	High	
<ul style="list-style-type: none"> <li>The operational onshore substation, National Grid substation and access road will be visible in close proximity, in the mid-ground of the view.</li> <li>The operation of the onshore infrastructure will result in a large-scale change in the view, due to the size, extent and close proximity of the onshore substation and National Grid substation, together</li> </ul>		

**Viewpoint 5 Public Right of Way, near Moor Farm**

with fencing, access road and operation and maintenance (O&M) vehicles during the operational period.

- During the operational period, the complex built form of the onshore substation and National Grid substation, including GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc) will be the prevailing feature of the view.
- National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons and bringing the National Grid overhead line/pylons closer to the viewpoint and appearing larger in scale in the view.
- The sealing end compounds will also be visible allowing the existing 400kV overhead electrical lines to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the National Grid substation.
- The onshore infrastructure will have resulted in some changes in ground profiles within and immediately around the onshore substation and National Grid substation. The SUDs basin will be visible in the right of the view.
- Woodland and hedgerows planted during pre-construction will be present in the view around the onshore substation (as per the landscape plan in **Figure 29.11a-b** and **Figure 29.12**) and help add to the layers of screening between the viewpoint and the onshore substation/National Grid substation. The PRoW on which the viewpoint is located will be lined by a young hedgerow and individual field boundary trees, as shown in the immediate foreground in **Figure 29.17b**, however there is still likely to be views over the hedgerow to the onshore substation, National Grid substation and National Grid re-alignment works.
- The onshore substation and National Grid substation will be viewed against the backdrop of semi-natural ancient woodland, which provides some mitigation through its visual containment and its natural appearance, which offsets the technological appearance of the onshore substation. The built form of the onshore substation and National Grid substation will also be lower in height than this woodland at Grove Wood/Laurel Covert.
- Lighting of the substations will be visible at times, but this is assumed to be passive lighting (passive infra-red) and the onshore substations will not be permanently lit.
- The magnitude of change resulting from the onshore substation and National Grid substation will reduce when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.

Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.17c</b> )	Medium
---	--------

- The PRoW on which the viewpoint is located will be lined by a mature native hedgerow and individual field boundary trees, as shown in the immediate foreground in **Figure 29.17c**. Provided that this hedgerow is maintained at approximately 2m high, it will provide an effective and immediate screening alongside the PRoW, such that walkers will not be able see directly the view of the onshore substation, and National Grid substation, but may see broken views through the foreground foliage of the hedgerow.
- The National Grid re-alignment works will be visible due to the height and proximity of the pylons and overhead lines to the viewpoint, forming prominent high-voltage transmission line elements at closer proximity and larger in scale in the view.
- The sealing end compounds are unlikely to be visible due to the intervening screening afforded by the immediate hedgerow and the maturing planting around these sealing end compounds.
- Views of the onshore substation and National Grid substation from residents of Fristonmoor are likely to be increasingly screened by layers of re-instated hedgerows, individual field boundary trees and the 'covert' woodland blocks to the south of Fristonmoor (as per the landscape plan in **Figure 29.11a-b** and **Figure 29.12**), with the National Grid re-alignment works forming the most prominent elements in the view.

Viewpoint 5 Public Right of Way, near Moor Farm			
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
People walking on the PRow near Moor Farm (Fristonmoor):	Significant, short-term, temporary	Significant, long-term, temporary	Significant, long-term, permanent
Residents of Moor Farm (Fristonmoor):	Significant, short-term, temporary	Significant, long-term, temporary	Significant, long-term, permanent

### Viewpoint 6 Friston, Village Green

Viewpoint 6 Friston, Village Green				
Designations:	None	Grid reference:	E: 641198	N: 260337
LCT:	Estate Sandlands (7)	View direction:	12°	
		Distance to the onshore substation:	0.78km	
Receptors:	Viewpoint is representative of views experienced by residents of Friston and motorists driving north on the B1121 through the centre of Friston.			
Baseline description (existing view is shown in <b>Figure 29.18a</b> ):				
<ul style="list-style-type: none"> <li>The existing view is defined by the setting of Friston village green, looking across the green to Friston Church, and by the residential housing on Hillcrest which is adjacent to the village green.</li> <li>The view is contained largely within the village of Friston, but does extend beyond to the woodland at Grove Wood.</li> <li>The main focus of the view is Friston Church, its tower rising above the surrounding houses to form a focus in the village skyline.</li> <li>The landscape is well wooded, with a large stand of ancient semi-natural woodland at Grove Wood forming the backdrop to the village and providing enclosure of the view north. Trees within the village provide further visual enclosure to the setting of the village.</li> <li>There are two pylons visible on the skyline of the view, but the majority of the National Grid overhead transmission line is not visible.</li> <li>Saxmundham Road extends to the north and is lined by amenity trees on the edge of the village green.</li> <li>The perception is of a small, tranquil, traditional village set around the village green and church.</li> </ul>				
Sensitivity to change: <i>Combination of the value of the view and the susceptibility of each visual receptor</i>				
Value:	Medium-high			
<ul style="list-style-type: none"> <li>The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.</li> <li>It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.</li> <li>The view is representative of the view experienced by residents in the village of Friston and people using the open space at the village green. The view is specific to these areas and to a relatively limited number of people, however the setting of Friston village in the view is likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character and setting of their place of residence.</li> <li>The view displays traditional rural qualities and scenic interest arising from the village character and setting of the ancient woodland, interrupted only by the presence of some National Grid pylons in the backdrop.</li> </ul>				

Viewpoint 6 Friston, Village Green		
Receptor	Susceptibility to change	Sensitivity to change
Residents of Friston:	High	High
Motorists on B1121 through the centre of Friston:	Medium	Medium-high
Magnitude of change:		
Geographic extent:	Short distance/local extent	
<p>The onshore substation will be visible at short distance and local extent, located at a distance of approximately 0.78km to the south of the viewpoint. The National Grid substation is located 0.81km from the viewpoint. The view of the onshore substation is representative of views from a localised area in the centre of Friston village around the village green.</p>		
Magnitude of change (construction):	Low (during construction period)	
<ul style="list-style-type: none"> <li>The construction of the onshore substation and National Grid substation will largely be screened during the construction period by housing in Friston in the foreground and intervening layers of vegetation/trees. The onshore cable route construction works will not be visible.</li> <li>Only the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible during construction through intervening trees and will only be slightly apparent behind housing in the view.</li> <li>The construction of the onshore substation and National Grid substation will result in a small change in the view, due to the extent of intervening screening and the limited amount of the onshore substation and National Grid substation visible. Lower lying features such as fencing, access roads, vehicles, the stockpiling of subsoil/topsoil and changes in ground profiles and SUDs basins will not be visible in the view.</li> <li>The majority of the National Grid overhead line realignment works will not be visible during the construction period, or the installation of sealing end compounds, due to intervening screening, with the exception of the upper part of one new pylon visible in the backdrop between housing and vegetation.</li> <li>Task and vehicle lighting may be used in the hours of darkness during approved working hours.</li> </ul>		
Magnitude of change (operation, first year of operational phase):	Low	
<p><b>(Figure 29.18b)</b></p> <ul style="list-style-type: none"> <li>The operation of the onshore substation and National Grid substation will largely be screened during the operational period by housing in Friston in the foreground and intervening layers of vegetation/trees.</li> <li>Only the larger electrical infrastructure associated with the onshore substation, such as the harmonic filters, will be visible through intervening trees and will only be slightly apparent behind housing in the view as they are screened by foreground housing and trees.</li> <li>The operation of the onshore substation and National Grid substation will result in a small change in the view, due to the extent of intervening screening and the limited amount of the onshore substation and National Grid substation visible. Lower lying features such as fencing, access roads, O&amp;M vehicles and changes in ground profiles and SUDs basins will not be visible in the view.</li> <li>The majority of the National Grid overhead line realignment works will not be visible during the operational period, or the sealing end compounds, due to intervening screening, with the exception of the upper part of one new pylon visible in the backdrop between housing and vegetation.</li> <li>Woodland and hedgerows planted during construction will not be visible in the view until they are well established/mature.</li> <li>The onshore substation and National Grid substation will be viewed against the backdrop of semi-natural ancient woodland, which provides some mitigation through its visual containment and its natural appearance, which offsets the technological appearance of the onshore substation. The</li> </ul>		

Viewpoint 6 Friston, Village Green			
<p>built form of the onshore substation and National Grid substation will also be lower in height than this woodland at Grove Wood/Laurel Covert.</p> <ul style="list-style-type: none"> <li>Lighting of the substations will be visible at times, but this is assumed to be passive lighting (passive infra-red) and the onshore substations will not be permanently lit.</li> <li>The magnitude of change resulting from the onshore substation and National Grid substation will reduce when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.</li> </ul>			
Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.18c</b> )		Low	
<ul style="list-style-type: none"> <li>Mitigation woodland planting and individual tree planting along the intervening field boundaries to the north of Friston, is predicted to have grown to provide some further screening of the taller components of the onshore substation in the view, however the magnitude of change remains low after approximately 15 years post construction, due to the partial visibility of the upper parts of some of the taller infrastructure in the view.</li> </ul>			
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Residents of Friston:	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Motorists on B1121 through the centre of Friston:	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent

### Viewpoint 8 B1121 Saxmundham Road, north of Friston

Viewpoint 8 B1121 Saxmundham Road, north of Friston				
Designations:	None	Grid reference:	E: 640477	N: 260862
LCT:	Estate Sandlands (7)	View direction:	70°	
		Distance to the onshore substation:	0.96km	
Receptors:	Viewpoint is representative of views experienced by motorists driving on the B1121 Saxmundham Road and residents of Moor Farm.			
Baseline description (existing view is shown in <b>Figure 29.20a</b> ):				
<ul style="list-style-type: none"> <li>Although the view is fundamentally rural in character, it is dominated by the National Grid high voltage overhead transmission line and double row of electrical pylons, with electrical lines extending into the distance in the view. The large scale and visual complexity of these features is stark compared to the generally small scale elements of the rural landscape in the view.</li> <li>The view is relatively open, across medium to large scale arable agricultural fields, enclosed by hedgerows and scattered hedgerow trees, in a regular pattern with straight boundaries. Clipped hedgerows, regular pattern and arable use of fields create the impression of a well maintained/managed landscape, although there has been visible hedgerow loss through agricultural intensification.</li> <li>The landscape is well wooded, with a large stand of ancient semi-natural woodland at Grove Wood and the adjoining woodland of Laurel Covert forming the backdrop and providing enclosure of the view. Other smaller stands of woodland and thicker areas of hedgerow combine to provide further wooded cover.</li> <li>The landform is a gently undulating plateau, rising gradually to the north and east.</li> </ul>				

Viewpoint 8 B1121 Saxmundham Road, north of Friston		
<ul style="list-style-type: none"> <li>The inherent characteristics are relatively simple, consisting mainly agricultural fields, woodland and sky, although the view is made more complex by the tall vertical pylons and transmission lines.</li> <li>There is relatively little built development visible, with just Moor Farm (Fristonmoor) being just about visible behind trees on the skyline.</li> </ul>		
Sensitivity to change: <i>Combination of the value of the view and the susceptibility of each visual receptor</i>		
Value:	Medium-low	
<ul style="list-style-type: none"> <li>The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.</li> <li>It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.</li> <li>The view is incidental to the drive along the B1121 Saxmundham Road, which connects Friston with Saxmundham and is likely to be used by a large number of people locally.</li> <li>The rural setting and views from this road are likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character in the backdrop to the travel between Friston and Saxmundham, although the scenic quality is reduced by the pylons and large scale fields.</li> <li>The view displays traditional rural qualities and some scenic interest arising from the interaction of the arable agricultural fields in the setting of a large areas of semi-natural ancient woodland but is dominated by the influenced of the large scale pylons and high voltage overhead transmission line.</li> </ul>		
Receptor	Susceptibility to change	Sensitivity to change
Motorists driving on the B1121 Saxmundham Road:	Medium	Medium
Residents of Moor Farm:	High	High
Magnitude of change:		
Geographic extent:	Short distance/local extent	
<p>The onshore substation will be visible at short distance and local extent, located at a distance of approximately 0.96km to the east of the viewpoint. The National Grid substation is located 0.77km from the viewpoint. The view of the onshore substation is representative of views from a localised area in the centre of Friston village around the village green.</p>		
Magnitude of change (construction):	Medium-high (during construction period)	
<ul style="list-style-type: none"> <li>The construction of the onshore substation, National Grid substation and access road will be visible in close proximity, in the foreground and midground of the view and will be viewed in the context of the large-scale pylons and high voltage overhead transmission line which dominate the existing view.</li> <li>The scale of the onshore substation and National Grid substation is subsumed below the vertical scale of the electrical pylons and is also contained by larger scale of Grove Wood in the backdrop.</li> <li>The construction of these onshore infrastructure will result in a medium-large scale change in the view, due to the size, extent and close proximity of the onshore substation, National Grid substation and construction compounds, together with fencing, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period.</li> <li>The construction of the access road will be prominent crossing the foreground of the view, passing under the overhead lines. The movement of construction vehicles along the access road to the onshore substation will be visible in the view.</li> <li>During the construction period, the built form of the onshore substation and National Grid substation will take shape during the construction and installation of the substation platforms, GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc). With progress through the construction period, the built forms of the constructed infrastructure will increase the influence of large buildings and infrastructure.</li> </ul>		



**Viewpoint 8 B1121 Saxmundham Road, north of Friston**

- During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons. The installation of sealing end compounds will also be visible allowing the existing 400kV overhead lines to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the to connect the National Grid substation.
- The construction of the onshore infrastructure will result in some changes in ground profiles within and immediately around the onshore substation and National Grid substation.
- The loss of the single hedgerow within the National Grid substation will be seen during construction.
- Task and vehicle lighting may be used in the hours of darkness during approved working hours.

Magnitude of change (operation, first year of operational phase):	Medium
---	--------

(**Figure 29.20b**)

- The operational onshore substation, National Grid substation and access road will be visible in close proximity, in the mid-ground of the view.
- Electrical transmission infrastructure is substantially characteristic in the existing view and will remain the prevailing feature of the view. The addition of the onshore substation and National Grid substation adds features that are substantially characteristic in the existing view and therefore represent a relatively lower change than in other views, where the overhead transmission line has less influence in the baseline.
- The operation of the onshore infrastructure will result in a medium scale change in the view, due to the size, extent and proximity of the onshore substation and National Grid substation, together with fencing, access road and operation and maintenance (O&M) vehicles during the operational period.
- During the operational period, the complex built form of the onshore substation and National Grid substation, including GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc) will be readily apparent features of the view, but seen in the context of the large scale overhead transmission line and pylons.
- National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons.
- The sealing end compounds will also be visible allowing the existing 400kV overhead lines to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the to connect the National Grid substation.
- The access road will be visible crossing the foreground of the view, passing under the overhead lines. The movement of O&M vehicles along the access road to the onshore substation will be visible in the view.
- The onshore infrastructure will have resulted in some changes in ground profiles within and immediately around the onshore substation and National Grid substation.
- Woodland and hedgerows planted during pre-construction and at the end of the construction period will be present in the view around the onshore substation (as per the OLMP in **Figure 29.11a-b** and **Figure 29.12**), but will have limited influence as landscape components/screening features until at least 5 years post-planting.
- The onshore substation and National Grid substation will be viewed against the backdrop of semi-natural ancient woodland, which provides some mitigation though its visual containment and its natural appearance, which offsets the technological appearance of the onshore substation. The built form of the onshore substation and National Grid substation will also be lower in height than this woodland at Grove Wood/Laurel Covert.
- Lighting of the substations will be visible at times, but this is assumed to be passive lighting (passive infra-red) and the onshore substations will not be permanently lit.

Viewpoint 8 B1121 Saxmundham Road, north of Friston			
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the onshore substation and National Grid substation will reduce when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.</li> </ul>			
Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.20c</b> )		Medium-low	
<p>The operational onshore substation, National Grid substation and access road will be visible in the mid-ground of the view, but are increasingly screened by layers of hedgerows and woodland (as per the OLMP in <b>Figure 29.11a-b and Figure 29.12</b>).</p> <ul style="list-style-type: none"> <li>It will mainly be the upper parts of the taller infrastructure and buildings within the onshore substation that will be visible, beyond and above the intervening woodland and hedgerows, with the lower infrastructure and ground level features largely screened.</li> <li>The National Grid substation will be visible, but behind and at the base of the prominent foreground overhead pylons. The sealing end compounds will also be visible in this context, adjacent to the re-aligned National Grid overhead pylons.</li> <li>A network of hedgerows around the perimeter of the sealing end compounds and National Grid substation will help to integrate these features into the landscape.</li> <li>Electrical transmission infrastructure is substantially characteristic in the existing view and will remain the prevailing feature of the view. The addition of the onshore substation and National Grid substation adds features that are substantially characteristic in the existing view and therefore represent a relatively lower change than in other views, where the overhead transmission line has less influence in the baseline.</li> <li>National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons.</li> </ul>			
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Motorists driving on the B1121 Saxmundham Road:	Significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Residents of Moor Farm:	Significant, short-term, temporary	Significant, long-term, temporary	Significant, long-term, permanent

### Viewpoint 9 B1121 Aldeburgh Road, south of Friston

Viewpoint 9 B1121 Aldeburgh Road, south of Friston				
Designations:	None	Grid reference:	E: 641464	N: 259905
LCT:	Estate Sandlands (7)	View direction:	356°	
		Distance to the onshore substation:	1.15km	
Receptors:	Viewpoint is representative of views experienced by motorists approaching Friston on the B1121 Aldeburgh Road and residents of southern part of Friston, particularly dwellings along Aldeburgh Road.			
Baseline description (existing view is shown in <b>Figure 29.21a</b> ):				
<ul style="list-style-type: none"> <li>Open view from the edge of Friston on Aldeburgh Road, with the open view extending east across large-scale, arable fields and north to take in the village of Friston.</li> </ul>				

**Viewpoint 9 B1121 Aldeburgh Road, south of Friston**

- View has a variety of landscape elements, at the juxtaposition between the urban/residential edge of Friston, with the rural character of the adjacent arable fields and the setting of the semi-natural ancient woodland at Grove Wood.
- The existing view is defined by the setting of Friston village, taking in housing on Aldeburgh Road and Grove Road, and Friston Church, which forms the focal point in the view.
- Aldeburgh Road crosses the view, extending north where it is contained by hedgerow field boundaries.
- Maintained gardens, clipped hedgerows, regular pattern and arable use of fields create the impression of a well maintained/managed landscape, although large field sizes indicate that hedgerows may have been removed for agricultural intensification and there are detractors such as pylons in the backdrop.
- The landscape is well wooded, with a large stand of ancient semi-natural woodland at Grove Wood forming the backdrop to the village and providing enclosure of the view north. Trees within the village provide further visual enclosure to the setting of the village.
- The skyline backdrop to the village of Friston in the view is traversed by the National Grid high voltage overhead transmission line and double row of electrical pylons, with electrical lines strung across the skyline behind the housing and church in Friston, and passing behind Grove Wood.
- The perception is of a relatively tranquil, traditional rural village setting whose backdrop has been influenced by modern, large-scale energy transmission infrastructure.

Sensitivity to change: *Combination of the value of the view and the susceptibility of each visual receptor*

Value: Medium

- The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.
- It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.
- The view is incidental to the drive along the B1121 Aldeburgh Road, arriving into Friston, which connects Friston with Aldeburgh and is likely to be used by a large number of people locally.
- The rural setting and views from this road are likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character in the backdrop to the travel between Friston and Aldeburgh, and to the rural setting of the village of Friston.
- The view displays traditional rural qualities and some scenic interest arising from the interaction of the village and Friston Church, with the surrounding arable landscape and the setting of nearby ancient woodland, but is also influenced by the high voltage overhead transmission line in the village backdrop.

Receptor	Susceptibility to change	Sensitivity to change
Motorists approaching Friston on the B1121 Aldeburgh Road:	Medium	Medium
Residents of southern part of Friston, particularly Aldeburgh Road:	High	High

Magnitude of change:

Geographic extent: Short distance/local extent

The onshore substation will be visible at short distance and local extent, located at a distance of approximately 1.15km to the north of the viewpoint. The National Grid substation is located 1.25km from the viewpoint. The view of the onshore substation is representative of views from a localised area on the southern edge of Friston village near Aldeburgh Road.

Magnitude of change (construction): Medium-low (during construction period)

- The construction of the onshore substation and National Grid substation will largely be screened during the construction period by housing in Friston in the foreground and intervening layers of

**Viewpoint 9 B1121 Aldeburgh Road, south of Friston**

vegetation/trees. The onshore cable route construction works will be visible crossing the arable field to the fore of Grove Wood.

- Only the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible during construction through intervening trees and will be apparent behind housing in Friston in the view creating a somewhat discordant juxtaposition of scale/built elements.
- The construction of the onshore substation and National Grid substation will result in a medium-low change in the view, due to the extent of intervening screening and the limited amount of the onshore substation and National Grid substation visible. Lower lying features such as fencing, access roads, vehicles, the stockpiling of subsoil/topsoil and changes in ground profiles and SUDs basins will not be visible.
- During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons.. The installation of sealing end compounds will not be visible due to intervening screening.
- Task and vehicle lighting may be used in the hours of darkness during approved working hours.

Magnitude of change (operation, first year of operational phase): ( <b>Figure 29.21b</b> )	0. Medium-low
---	---------------

- The operation of the onshore substation and National Grid substation will largely be screened during the operational period by housing in Friston in the foreground and intervening layers of vegetation/trees.
- Only the larger electrical infrastructure associated with the onshore substation, such as harmonic filters and taller GIS room building will be visible through intervening trees and will only be apparent behind housing in the view as they are screened by foreground housing and trees. They will however, introduce elements that draw attention because of their contrast with smaller scale development and focal points (such as Friston Church).
- The operation of the onshore substation and National Grid substation will result in a small/moderate change in the view, due to the extent of intervening screening and the limited amount of the onshore substation and National Grid substation visible. Lower lying features such as fencing, access roads, O&M vehicles and changes in ground profiles and SUDs basins will not be visible in the view.
- The realigned National Grid pylon towers will be visible during the operational period, consisting of two new pylons and the modification or replacement of another pylon, and the diversion the northern overhead line route, resulting in an overall increase of one additional pylon from the total number of pylons visible on the current route, however the sealing end compounds will not be visible due to intervening screening.
- Woodland and hedgerows planted during construction will not be visible in the view due to the intervening buildings and housing in Friston.
- The onshore substation and National Grid substation will be viewed against the backdrop of semi-natural ancient woodland, which provides some mitigation though its visual containment and its natural appearance, which offsets the technological appearance of the onshore substation. The built form of the onshore substation and National Grid substation will also be lower in height than this woodland at Grove Wood/Laurel Covert.
- Lighting of the substations will be visible at times, but this is assumed to be passive lighting (passive infra-red) and the onshore substations will not be permanently lit.
- The magnitude of change resulting from the onshore substation and National Grid substation will reduce when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.

Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.21c</b> )	1. Medium-low
---	---------------

Viewpoint 9 B1121 Aldeburgh Road, south of Friston			
<ul style="list-style-type: none"> <li>Mitigation planting will be partially visible in the backdrop to Friston in the view, providing further partial screening of the onshore substation and National Grid substation, however in this view, it is not likely to have grown high enough, after 15 years, to screen the taller elements of the electrical infrastructure, which will remain visible in the backdrop to Friston, such that magnitude of change remains medium-low.</li> </ul>			
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Motorists approaching Friston on the B1121 Aldeburgh Road:	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Residents of southern part of Friston, particularly Aldeburgh Road:	Significant, short-term, temporary	Significant, long-term, temporary	Significant, long-term, permanent

### Viewpoint 10 B1119 Saxmundham Road

Viewpoint 10 B1119 Saxmundham Road				
Designations:	None	Grid reference:	E: 641095	N: 262490
LCT:	Ancient Estate Claylands (1)	View direction:	167°	
		Distance to the onshore substation:	1.24km	
Receptors:	Viewpoint is representative of views experienced by motorists driving on the B1119 Saxmundham Road.			
Baseline description (existing view is shown in <b>Figure 29.22a</b> ):				
<ul style="list-style-type: none"> <li>Open view from the plateau landform to the north of the onshore substation, which affords an aspect south across arable land to the National Grid overhead lines but is relatively contained by the rising landform in the foreground.</li> <li>Large-scale arable agricultural fields, with relatively limited enclosure of foreground fields, giving way to field with hedgerow field boundaries and field boundary trees/shelterbelts around farms in the middle distance.</li> <li>Although the view is fundamentally rural in character, the backdrop is strongly influenced by the National Grid high voltage overhead transmission line and double row of electrical pylons, with electrical lines strung across the view. The field pattern is relatively large-scale created by hedgerow removal.</li> <li>Telegraph poles also traverse the view and add to the 'wirescape' visible.</li> <li>Large area of semi-natural ancient woodland at Grove Wood, together with the adjoining Laurel Covert woodland, forms the backdrop and contains the view to the south-east. The combination of these larger woodland blocks with smaller stands of trees and hedgerows creates the impression of a well-wooded landscape.</li> <li>Farmsteads at Clouting's Farm and Pattie's Farm are visible on the foreground skyline to the south, providing focal points and are set within farm woods.</li> </ul>				
Sensitivity to change: <i>Combination of the value of the view and the susceptibility of each visual receptor</i>				
Value:	Medium			

**Viewpoint 10 B1119 Saxmundham Road**

- The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it afforded any protection in planning policy.
- It is not a specific viewpoint and there are no facilities provided to aid enjoyment of the view.
- The view is incidental to the drive along the B1119 Saxmundham Road, which connects Leiston with Saxmundham and is likely to be used by a large number of people locally.
- The rural setting and views from this road are likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character in the backdrop to the travel between Leiston and Saxmundham.
- The view displays rural qualities and some scenic interest arising from the interaction of the arable agricultural fields in the setting of a large areas of semi-natural ancient woodland but is also influenced by the large-scale pylons and high voltage overhead transmission lines that extend across the view.

Receptor	Susceptibility to change	Sensitivity to change
Motorists driving on the B1119 Saxmundham Road:	Medium	Medium
Magnitude of change:		
Geographic extent:	Short distance/local extent	
The onshore substation will be visible at short distance and local extent, located at a distance of approximately 1.24km to the south of the viewpoint. The National Grid substation is located 1.1km from the viewpoint. The view of the onshore substation is representative of views from a localised area on the B1119 Saxmundham Road.		
Magnitude of change (construction):	2. Medium-low (during construction period)	
<ul style="list-style-type: none"> <li>• The construction of the onshore substation and National Grid substation will be visible in the mid-ground of the view, however they will be partially screened and contained by the rising landform in the foreground, such that the ground level of the onshore substation is not visible.</li> <li>• The National Grid substation will be located closest to the viewpoint, but the larger height of the elements of the East Anglia ONE North onshore substation will form the more prominent elements, along with the larger machinery and cranes required during construction.</li> <li>• The construction of these onshore infrastructure will result in a small/moderate scale change in the view, with much of the construction works screened by a combination of the foreground landform and woodland/hedgerows around Clouting's Farm and Little Moor Farm on the skyline.</li> <li>• Due to the intervening screening, the fencing, access road, vehicles and the stockpiling of subsoil/topsoil needed during the construction period are unlikely to be visible in the view.</li> <li>• During the construction period, the built form of the onshore substation and National Grid substation will take shape during the construction and installation of the GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc). With progress through the construction period, the built forms of the constructed infrastructure will increase the influence of large buildings and infrastructure, such that electrical infrastructure becomes an apparent influence in the view.</li> <li>• The scale of the onshore substation and National Grid substation is subsumed below the vertical scale of the electrical pylons.</li> <li>• During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons. The installation of sealing end compounds will also be partially visible to connect the National Grid substation to the existing high-voltage transmission line.</li> <li>• Task and vehicle lighting may be used in the hours of darkness during approved working hours.</li> </ul>		
Magnitude of change (operation, first year of operational phase):	3. Medium-low	

**Viewpoint 10 B1119 Saxmundham Road**

(Figure 29.22b)

- The operational onshore substation and National Grid substation will be visible in the mid-ground of the view, however they will be partially screened and contained by the rising landform in the foreground, such that the ground level of the onshore substation is not visible.
- The National Grid substation will be located closest to the viewpoint, but the larger height of the elements of the East Anglia ONE North onshore substation will form the more prominent elements.
- The operation of the onshore substation and National Grid substation will result in a small/moderate scale change in the view, with much of the onshore substation screened by a combination of the foreground landform and woodland/hedgerows around Clouting's Farm and Little Moor Farm on the skyline.
- Due to the intervening screening, the fencing, access road, O&M vehicles and changes in ground profiles are unlikely to be visible in the view.
- The built form of the onshore substation and National Grid substation will be formed by the GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc), becoming an apparent influence in the view.
- The scale of the onshore substation and National Grid substation is subsumed below the vertical scale of the electrical pylons but is stark in comparison to the smaller scale of farmsteads in the foreground.
- The realigned National Grid pylon towers will be visible, consisting of two new pylons and the modification or replacement of another pylon, and the diversion the northern overhead line route, resulting in an overall increase of one additional pylon from the total number of pylons visible on the current route, bringing the National Grid overhead line/pylons closer and larger in scale in the view.
- The sealing end compounds will not be visible due to the foreground landform screening and tree cover.
- Lighting of the substations will be visible at times, but this is assumed to be passive lighting (passive infra-red) and the onshore substations will not be permanently lit.
- The magnitude of change resulting from the onshore substation and National Grid substation will reduce when the trees and hedgerows in the view are in leaf and provide more screening during the spring to late summer months.

Magnitude of change (operation, 15 years post construction): (Figure 29.22c) 4. Low

- Layers of maturing woodland and hedgerows planted as part of the OLMP (Figure 29.11a-b and Figure 29.12) will be visible in the mid-ground of the view, joining existing stands of woodland on the mid-ground skyline and will further reduce the amount of the onshore substation and National Grid substation visible in the view.
- Mitigation planting will reduce the magnitude of change to low after 15 years when the woodland planting is predicted to have grown to provide substantial screening of the onshore substation and National Grid substation in the view, softening its appearance and integrating it into the well wooded landscape context.
- The realigned National Grid pylon towers will be the most visible elements in the view, consisting of two new pylons and the modification or replacement of another pylon, and the diversion the northern overhead line route.

**Significance of effect:**

Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Motorists driving on the B1119 Saxmundham Road:	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent

## Viewpoint 14 Grove Road

Viewpoint 14 Grove Road				
Designations:	None	Grid reference:	E: 641619	N: 261025
LCT:	Estate Sandlands (7)	View direction:	°HOLD	
		Distance to the onshore substation:	0.11km	
Receptors:	The viewpoint is located on Grove Road, adjacent to Grove Wood and between Friston and Laurel Covert, where the view becomes opens to the north and west of the road. The viewpoint is representative of views experienced primarily by motorists and cyclists on Grove Road.			
Baseline description (existing view is shown in <b>Figure 29.26a</b> ):				
<ul style="list-style-type: none"> <li>Open view across medium to large scale, arable agricultural fields, which is flat and open, but also partially enclosed by hedgerows, scattered stands of trees and woodland blocks.</li> <li>The foreground is occupied by agricultural arable farmland, extending into the distance over gently undulating terrain, which rises gradually to the north to provide some containment to landscape, reinforced by the woodland blocks on the skyline.</li> <li>The landscape is well wooded, with a large stand of ancient, semi-natural woodland at Grove Wood and the adjoining woodland of Laurel Covert forming the backdrop and providing enclosure of the view. Other smaller stands of woodland and thicker areas of hedgerow combine to provide further wooded cover, particularly alongside Grove Road to the south.</li> <li>The landform is a gently undulating plateau, rising gradually to the north</li> <li>The skyline of the view is traversed by the existing National Grid high voltage overhead transmission line and double row of electrical pylons, with electrical lines strung across the skyline of the view.</li> <li>The composition of the view is relatively simple, consisting mainly of agricultural fields, woodland and sky, although it is interrupted by the tall vertical pylons behind the wooded backdrop.</li> <li>There is relatively little built development visible, but Moor Farm (Fristonmoor) forms a focal point on the skyline. Its vernacular building style of dark weatherboard and red-tiled roof are distinctive.</li> </ul>				
Sensitivity to change: <i>Combination of the value of the view and the susceptibility of each visual receptor</i>				
Value:		Medium		
<ul style="list-style-type: none"> <li>The viewpoint is not located within, nor does it overlook, a nationally or locally designated landscape, nor is it a view which has been identified in policy or guidance. It is not a notable viewpoint of specific importance.</li> <li>The view is representative of the view experienced by motorists and cyclists passing by on Grove Road, while either driving north out of Friston; or approaching the village southwards. The view is specific to these areas and generally used by local traffic and cyclists, however the rural setting of the view is likely to be valued by the community at a local level, as having particular scenic qualities which are valued as part of the local character and setting of their place of residence.</li> <li>The view displays traditional rural qualities and some scenic interest arising from the interaction of the arable agricultural fields in the setting of a large areas of semi-natural ancient woodland, while also being influenced by the pylons on the skyline.</li> </ul>				
Receptor		Susceptibility change	to	Sensitivity to change
Motorists driving north on Grove Road out of Friston:		Medium		Medium
Cyclists heading north on Grove Road out of Friston:		Medium-high		Medium-high
Magnitude of change:				



Viewpoint 14 Grove Road	
Geographic extent:	Short distance/local extent
The onshore substation will be visible at short distance and local extent (and local context), in the immediate foreground of the view, located at a distance of approximately 0.11km to the north-west of the viewpoint. The National Grid substation is located 0.33km from the viewpoint. The view of the onshore substation is representative of views from a localised area of Grove Road between Friston and Laurel Covert, the closest section of Grove Road to the onshore substation.	
Magnitude of change (construction):	High (during construction period)
<ul style="list-style-type: none"> <li>• The construction of the onshore substation, National Grid substation, access road and onshore cable route will be visible in close proximity, in the foreground of the view.</li> <li>• The construction of the onshore infrastructure will result in a large-scale change in the view, due to the size, extent and close proximity of the onshore substation, National Grid substation and construction compounds, together with fencing, access road, vehicles, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period, which come closer to the viewpoint than the onshore substation.</li> <li>• During the construction period, the built form of the onshore substation and National Grid substation will take shape during the construction and installation of the substation platforms, GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc). With progress through the construction period, the built forms of the constructed infrastructure will increase the influence of large buildings and infrastructure, such that electrical infrastructure becomes the prevailing feature of the view.</li> <li>• During the construction period, the realignment of the existing overhead lines will be visible; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons. The installation of sealing end compounds will also be partially visible, although largely behind the foreground substations, allowing the existing 400kV overhead lines to be brought down from the pylons up to four new sealing end compounds and then connected via underground cable to the National Grid substation.</li> <li>• The construction of the onshore infrastructure will result in some changes in ground profiles within and immediately around the onshore substation and National Grid substation.</li> <li>• Physical loss of hedgerows and a small area of woodland at Laurel Covert will be visible within the onshore substation and National Grid substation.</li> <li>• Task and vehicle lighting may be used in the hours of darkness during approved working hours.</li> </ul>	
Magnitude of change (operation, first year of operational phase): <b>(Figure 29.26b)</b>	High
<ul style="list-style-type: none"> <li>• The operational onshore substation and National Grid substation will be visible in close proximity, in the immediate foreground of the view, although the National Grid substation will largely be screened behind the intervening East Anglia ONE North onshore substation which will form the foreground.</li> <li>• The operation of the onshore infrastructure will result in a large-scale change in the view, due to the size, extent and close proximity of the onshore substation, National Grid substation, together with fencing and operation and maintenance (O&amp;M) vehicles during the operational period.</li> <li>• During the operational period, the complex built form of the onshore substation and National Grid substation, including GIS building/control room and electrical infrastructure (such as shunt reactors, transformers, harmonic filters, statcom etc) will be the prevailing feature of the view. The harmonic filters, in particular, will be prominent as tall elements in the foreground.</li> <li>• The onshore substation will be viewed in the landscape context of the adjacent high-voltage transmission line. National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons..</li> </ul>	

**Viewpoint 14 Grove Road**

- The sealing end compounds will be located behind the National Grid substation and East Anglia ONE North onshore substation.
- The onshore infrastructure will have resulted in some changes in ground profiles within and immediately around the onshore substation and National Grid substation.
- By the first year of the operational phase, pre-construction woodland planting along Grove Road (**Figure 29.12**) will occupy the immediate foreground of the view and is assumed to have established and had several years growth during the construction period, but will have limited influence as screening feature by the first year of the operational phase.
- The onshore substation and National Grid substation will be viewed within a wooded envelope, in the backdrop of semi-natural ancient woodland, which provides some mitigation though its visual containment and its natural appearance, which offsets the technological appearance of the onshore substation.
- Lighting of the onshore substation will be visible at night, but this is assumed to be passive lighting (passive infra-red) and the onshore substation will not be permanently lit at night.

Magnitude of change (operation, 15 years post construction): ( <b>Figure 29.26c</b> )	Negligible
---	------------

- Mitigation woodland planting between the viewpoint and the onshore substation will be located in the immediate foreground of the view and is predicted to entirely screen the view of the onshore substation and National Grid substation. Mitigation woodland planting which will be in the immediate foreground of the view (directly in front of the viewpoint) is shown in the photomontage in **Figure 29.26c**, to provide an illustration of the landscape mitigation planting around the onshore substation site.
- Mitigation planting will reduce the magnitude of change to negligible after approximately 15 years post-construction, when the woodland planting is predicted to have grown to provide screening of the onshore substation and National Grid substation in the view.

**Significance of effect:**

Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Motorists driving north on Grove Road out of Friston:	Significant, short-term, temporary	Significant, long-term, temporary	Not significant, long-term, permanent
Cyclists heading north on Grove Road out of Friston:	Significant, short-term, temporary	Significant, long-term, temporary	Not significant, long-term, permanent

29.4.1.1.2 Settlements

47. An assessment of the visual effects of the onshore substation and National Grid substation on views experienced by residents of Friston is presented in the following technical assessment. The visual effects of the onshore substation and National Grid substation have been assessed as not significant on all other settlement receptors in the preliminary assessment in **section 29.2.3.1**.

## Friston

Residents of Friston	
Representative viewpoints:	Viewpoints 1, 2, 4, 6 and 9
Sensitivity to change:	
Residents of Friston:	High
Magnitude of change (predicted views from Friston are shown in <b>Figures 29.13, 29.14, 29.16, 29.18 and 29.21</b> )	
Geographic extent:	
<p>The village of Friston is located between 430m – 1.2km to the south of the onshore substation. The village has developed to have a distinct form, with a group of dwellings clustered around Friston Church, in the Church Road and Grove Road area in the north of the village. Several dwellings are located along the track extending north of Church Road to Woodside Farm. A secondary area has developed, fanning out on the manorial wasteland to the south of the village centre. This area was known as The Common until recently, and is now formed by housing on Low Road, Chase's Lane and Donkey Lane. These distinct areas, to the north and south of the village are located on either side of the public open space/village green in the centre of the village. The B1121 Aldeburgh Road/Saxmundham Road passes through the centre of the village, further defining these areas to the north and south of this main road. Friston House and its wooded grounds are situated to the north of the village and provide visual enclosure along part of Church Road. The magnitude of change resulting from the onshore substation and National Grid substation is considered for areas to the north of the village formed by Church Road, Grove Road and the village green (Area A); Friston village centre/green (Area B) and to the south of the village formed by Low Road, Chase's Lane and Donkey Lane (Area C). The magnitude of change resulting from the onshore substation and National Grid substation varies across these northern and southern areas of the village.</p>	
Area A: Northern part of Friston (Church Road/Grove Road)	
Magnitude of change (construction):	Medium-high
<ul style="list-style-type: none"> <li>The northern edges of Friston are most exposed to the changes resulting from the construction of the onshore substation and National Grid substation, where there will be some views north of the construction of the onshore substation and National Grid substation at close range from the track leading to Woodside Farm (Viewpoint 1) and from the eastern half of Church Road, through layers of intervening hedgerows and field boundary trees (Viewpoint 2). There will also be views of the construction from Grove Road, particularly near Church Road, on the northern edge of Friston (Viewpoint 4). The magnitude of change resulting from the construction of the onshore substation and National Grid substation on views from these areas of the village is assessed as varying between medium and high with the degree of intervening foreground screening on the northern edge of the village. Although there is often considerable intervening screening, which breaks up views of the onshore substation, the construction of the onshore substation and National Grid substation will generally result in medium-high changes in views from this northern edge of Friston, due to the size, extent and proximity of the built features taking shape during the construction period, together with the additional visual influence of fencing, the access road, vehicles, machinery, accommodation and cranes needed during the construction period.</li> <li>Views from the western half of Church Road and Hillcrest are screened by the intervening woodland within the grounds of Friston House. The magnitude of change resulting from the construction of the onshore substation and National Grid substation on views from these areas of the village is assessed as negligible.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Medium-high
<ul style="list-style-type: none"> <li>The northern edges of Friston are most exposed to the changes resulting from the operation of the onshore substation and National Grid substation, where there will be some views north of the operational onshore substation and National Grid substation at close range from the track leading to Woodside Farm (Viewpoint 1) and from the eastern half of Church Road, through layers of intervening hedgerows and field boundary trees (Viewpoint 2). There will also be views of the construction from Grove Road, particularly near Church Road, on the northern edge of Friston</li> </ul>	

**Residents of Friston**

(Viewpoint 4). The magnitude of change resulting from the operation of the onshore substation and National Grid substation on views from these areas of the village is assessed as medium-high, varying between medium and high with the degree of intervening foreground screening on the northern edge of the village. Although there is often considerable intervening screening, which breaks up views of the onshore substation, the operation of the onshore substation and National Grid substation will generally result in medium-high changes in views from this northern edge of Friston, due to the size, extent and proximity of the built features such as GIS buildings and external electrical infrastructure, together with the additional visual influence of fencing, the access road and O&M vehicles during the operational period.

- Views from the western half of Church Road and Hillcrest are screened by the intervening woodland within the grounds of Friston House. The magnitude of change resulting from the operation of the onshore substation and National Grid substation on views from these areas of the village is assessed as negligible.

Magnitude of change (operation, 15 years post construction):	Medium
--	--------

- The magnitude of change during the operational phase, 15 years post construction, on views experienced by residents of the northern edges Friston varies depending on the viewing location, as is evident in the representative viewpoint assessments from Viewpoints 1, 2 and 4. The magnitude of change is assessed as medium from the northern edges of Friston near Church Road (Viewpoint 2); low from Grove Road (Viewpoint 4) and negligible from Viewpoint 1 (near Friston House).
- The operational onshore substation, National Grid substation and access road will be partially visible in the mid-ground of these views from the northern edges of Friston, but will be increasingly screened by layers of re-instated hedgerows, individual field boundary trees and woodland (as per the OLMP in **Figure 29.11a-b** and **Figure 29.12**).
- It will mainly be the upper parts of the taller infrastructure and buildings within the onshore substation that will be visible, beyond and above the intervening woodland and hedgerows, with the lower infrastructure and ground level features entirely screened.
- The National Grid substation will largely be screened behind layers of hedgerows and woodland areas, with just the tops of the gantries visible near the overhead pylons. The sealing end compounds will not generally be visible in these views from the northern edges of Friston.
- Hedgerows will combine with woodland planting areas to integrate the substations into the landscape, providing both screening and an extension of elements that are characteristic in the local landscape.
- Although it will result in a more wooded setting to the north of Friston, with the maturing woodland, the open agricultural setting of the village has been retained in views from the northern edges of Friston, with screening achieved through multiple lines of planting, with a mix of blocks, belts, tree lines and reinstated hedges.
- The onshore substation will be viewed in the landscape context of the adjacent high-voltage transmission line. National Grid overhead line realignment works will have changed the appearance of the overhead line and pylons in the view, consisting of the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to the existing overhead pylons.

Area B: Friston village centre

Magnitude of change (construction):	Low
-------------------------------------	-----

- The magnitude of change resulting from the construction of the onshore substation and National Grid substation on views from the centre of Friston, such as the public open space/village green (Viewpoint 6) is assessed as low. The construction of the onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees. Only the top of the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible beyond intervening foreground buildings and trees during

Residents of Friston	
<p>construction, substantially screened by intervening trees and will only be slightly apparent in the view. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change resulting from the onshore substation and National Grid substation from the village centre.</p>	
Magnitude of change (operation, first year of operational phase):	Low
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the operation of the onshore substation and National Grid substation on views from the centre of Friston, such as the public open space/village green (Viewpoint 6) is assessed as low. The operation of the onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees. Only the top of the larger elements associated with the higher electrical infrastructure, such as the harmonic filters, will be visible beyond intervening foreground buildings and trees, substantially screened by intervening trees and will only be slightly apparent in the view. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change resulting from the onshore substation and National Grid substation from the village centre.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Low-negligible
<ul style="list-style-type: none"> <li>Mitigation woodland planting and individual tree planting along the intervening field boundary to the north of Friston, is predicted to have grown to almost providing further screening of the taller components of the onshore substation and National Grid substation, reducing the magnitude of change to low-negligible after approximately 15 years post construction.</li> </ul>	
Area C: Aldeburgh Road	
Magnitude of change (construction):	Medium-low (during construction period)
<ul style="list-style-type: none"> <li>The magnitude of change during construction resulting from the onshore substation and National Grid substation on views from the southern part of Friston along Aldeburgh Road (Viewpoint 9) is assessed as medium-low. The construction of the onshore substation and National Grid substation will largely be screened during the construction period by housing in Friston in the foreground and intervening layers of vegetation/trees within and to the north of the village. The larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible during construction through intervening trees and will be apparent in the backdrop to the village, beyond intervening housing and vegetation in views. The construction of the onshore substation and National Grid substation will result in medium-low changes in the views from this area of the village, due to the extent of intervening screening and the limited amount of the onshore substation and National Grid substation visible. Lower lying features such as fencing, access roads, vehicles, the stockpiling of subsoil/topsoil and changes in ground profiles and SUDs basins will not be visible. Viewpoint 9 (<b>Figure 29.21</b>) provides a representative example of the likely change resulting from the onshore substation and National Grid substation from the southern part of Friston.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Medium-low
<ul style="list-style-type: none"> <li>The magnitude of change during operation resulting from the onshore substation and National Grid substation on views from the southern part of Friston along Aldeburgh Road (Viewpoint 9) is assessed as medium-low. The operation of the onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees within and to the north of the village. The larger elements associated with the operational onshore substation, such as the higher electrical infrastructure e.g. the top of harmonic filters and GIS buildings, will be visible during operation and will be apparent in the backdrop to the village, beyond intervening housing and vegetation in views. The operation of the onshore substation and National Grid substation will result in medium-low changes in the views from this area of the village, due to the extent of intervening screening and the limited amount of the onshore substation and National Grid substation visible. Lower lying features such as fencing, access roads, vehicles, the stockpiling of subsoil/topsoil and changes in ground profiles and SUDs basins will not be visible. The re-aligned National Grid pylon towers will be visible in the backdrop to the village,</li> </ul>	

Residents of Friston			
consisting of two new pylons and the modification or replacement of another pylon. Viewpoint 9 ( <b>Figure 29.21</b> ) provides a representative example of the likely change resulting from the onshore substation and National Grid substation from the southern part of Friston.			
Magnitude of change (operation, 15 years post construction):		Medium-low	
<ul style="list-style-type: none"> <li>Mitigation planting will be partially visible in the backdrop to Friston in the views from Aldeburgh Road, providing further partial screening of the onshore substation and National Grid substation, however in these views experienced by residents of Aldeburgh Road on the southern edge of Friston, it is not likely to have grown high enough, after 15 years, to screen the taller elements of the electrical infrastructure, which will remain visible in the backdrop to Friston, such that magnitude of change remains medium-low.</li> </ul>			
Area D: Southern part of Friston (Low Road, Chase's Lane and Donkey Lane)			
Magnitude of change (construction):		Low	
Magnitude of change (operation, first year of operational phase):		Low	
Magnitude of change (operation, 15 years post construction with mitigation):		Negligible	
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Residents of Friston (Area A) Northern part of Friston (Church Road/Grove Road)	Significant, short-term, temporary (during construction period)	Significant, long-term, temporary from Church Road area of Friston. Not significant, long-term, temporary from Grove Road area of Friston.	Significant, long-term, permanent from Church Road area of Friston. Not significant, long-term, permanent from Grove Road area of Friston.
Residents of Friston (Area B) Friston village centre	Not significant, short-term, temporary (during construction period)	Not significant, long-term, temporary	Not significant, long-term, permanent
Residents of Friston (Area C) Aldeburgh Road	Significant, short-term, temporary (during construction period)	Significant, long-term, temporary	Significant, long-term, permanent
Residents of Friston (Area D) Southern part of Friston (Low Road, Chase's Lane and Donkey Lane)	Not significant, short-term, temporary (during construction period)	Not significant, long-term, temporary	Not significant, long-term, permanent

#### 29.4.1.1.3 Transport Routes

48. An assessment of the visual effects of the onshore substation and National Grid substation from the B1121 and Grove Road transport routes (**Figure 29.9**) is presented in the following technical assessment. The visual effects of the onshore substation and National Grid substation have been assessed as not significant on views experienced by motorists on all other transport routes in the preliminary assessment in **section 29.2.3.1**.

## B1121 Aldeburgh / Saxmundham Road

Motorists travelling on B1121 Aldeburgh / Saxmundham Road	
Representative viewpoints:	Viewpoints 8 and 9
Sensitivity to change:	
Motorists on B1121 Aldeburgh / Saxmundham Road:	Medium
Magnitude of change:	
Section A: Saxmundham to north of Moor Farm (Saxmundham Road)	
Magnitude of change (construction):	Negligible (during construction period)
<ul style="list-style-type: none"> <li>Motorists on the B1121 between Saxmundham and north of Moor Farm will generally have no views, or at most experience a negligible change to their views, due to the construction of the onshore substation and National Grid substation.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Negligible
<ul style="list-style-type: none"> <li>Motorists on the B1121 between Saxmundham and north of Moor Farm will generally have no views, or at most experience a negligible change to their views, due to the operation of the onshore substation and National Grid substation.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Negligible
<ul style="list-style-type: none"> <li>Motorists on the B1121 between Saxmundham and north of Moor Farm will generally have no views, or at most experience a negligible change to their views, due to the operation of the onshore substation and National Grid substation.</li> </ul>	
Section B: North of Moor Farm to Friston House (Saxmundham Road)	
Magnitude of change (construction):	Medium-high (during construction period)
<ul style="list-style-type: none"> <li>Motorists on the B1121 between Moor Farm and Friston House will experience a medium-high change to views experienced from this section of the road due to the construction of the onshore substation and National Grid substation to the east of the road. Viewpoint 8 (<b>Figure 29.20</b>) provides a representative example of the likely change in views from this section of the B1121. The construction of the onshore substation, National Grid substation and access road will be visible in close proximity, in the foreground and midground of the oblique views east and will be viewed in the context of the large-scale pylons and high voltage overhead transmission line which dominate the existing view. Changes to view from this section of the B1121 arising from the construction of the onshore substation and National Grid substation will occur due to the scale, extent and close proximity of the GIS buildings and electrical infrastructure taking shape during the construction period, together with construction compounds, fencing, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period. The construction of the access road off this section of the B1121 will also be prominent in the foreground of views experienced by motorists. The scale of the onshore substation and National Grid substation is subsumed below the vertical scale of the electrical pylons prominent in views from this section of the road and is also contained by and is lower in height than Grove Wood in the backdrop.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Medium
<ul style="list-style-type: none"> <li>Motorists on the B1121 between Moor Farm and Friston House will experience a medium-high change to views experienced from this section of the road due to the operation of the onshore substation and National Grid substation to the east of the road. Viewpoint 8 (<b>Figure 29.20</b>) provides a representative example of the likely change in views from this section of the B1121. The operational onshore substation, National Grid substation and access road will be visible in close proximity, in the foreground and midground of the oblique views east and will be viewed in the context of the large-scale pylons and high voltage overhead transmission line which dominate the existing view. Changes to view from this section of the B1121 arising from the operational onshore substation and National Grid substation will occur due to the scale, extent and close proximity of</li> </ul>	

Motorists travelling on B1121 Aldeburgh / Saxmundham Road	
<p>the GIS buildings and electrical infrastructure, together with the access road off this section of the B1121, which will be prominent in the foreground of views experienced by motorists. The scale of the onshore substation and National Grid substation is subsumed below the vertical scale of the electrical pylons prominent in views from this section of the road and is also contained by Grove Wood in the backdrop.</p>	
Magnitude of change (operation, 15 years post construction):	Medium-low
<ul style="list-style-type: none"> <li>Mitigation planting will be visible in the mid-ground of the view around the onshore substation and National Grid substation and will reduce visibility of the built infrastructure. Mitigation planting will reduce the magnitude of change to medium-low after 15 years when the woodland planting is predicted to have grown to provide partial screening of the onshore substation and National Grid substation in the view, softening its appearance and partially integrating it into the well wooded landscape context.</li> </ul>	
Section C: Friston House through Friston (Saxmundham Road)	
Magnitude of change (construction):	Low (during construction period)
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the construction of the onshore substation and National Grid substation on views from the B1121 passing through the centre of Friston is assessed as low. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change in views from this section of the B1121. The construction of the onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees, particularly woodlands within the grounds of Friston House. Only the top of the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible beyond intervening foreground buildings and trees during construction, substantially screened by intervening trees and will only be slightly apparent in views.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Low
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the operation of the onshore substation and National Grid substation on views from the B1121 passing through the centre of Friston is assessed as low. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change in views from this section of the B1121. The operational onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees, particularly woodlands within the grounds of Friston House. Only the top of the larger elements of electrical infrastructure will be visible intermittently beyond intervening foreground buildings and trees during operational, substantially screened by intervening trees and will only be slightly apparent in views.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Negligible
<ul style="list-style-type: none"> <li>Mitigation woodland planting along the intervening field boundary to the north of Friston, is predicted to have grown to almost entirely screen the views of the onshore substation and National Grid substation, reducing the magnitude of change to negligible after approximately 15 years post construction.</li> </ul>	
Section D: South of Friston (Aldeburgh Road)	
Magnitude of change (construction):	Medium-low (during construction period)
<ul style="list-style-type: none"> <li>Motorists on the B1121 Aldeburgh Road extending south out of Friston will experience a medium-low change to views due to the construction of the onshore substation and National Grid substation to the north-east of the road. Viewpoint 9 (<b>Figure 29.21</b>) provides a representative example of the likely change in views from this section of the B1121. The construction of the onshore substation and National Grid substation will largely be screened during the construction period by housing in Friston in the foreground and intervening layers of vegetation/trees within and to the north of the village. Only the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will</li> </ul>	



Motorists travelling on B1121 Aldeburgh / Saxmundham Road			
be visible during construction through intervening trees and will be partially apparent in the backdrop to the village, beyond intervening housing and vegetation in views. Lower lying features such as fencing, access roads, vehicles, the stockpiling of subsoil/topsoil and changes in ground profiles and SUDs basins will not be visible.			
Magnitude of change (operation, first year of operational phase):		Medium-low	
<ul style="list-style-type: none"> <li>Motorists on the B1121 Aldeburgh Road extending south out of Friston will experience a medium-low change to views due to the operation of the onshore substation and National Grid substation to the north-east of the road. Viewpoint 9 (<b>Figure 29.21</b>) provides a representative example of the likely change in views from this section of the B1121. The operation of the onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees within and to the north of the village. Only the larger elements associated with the operation of the onshore infrastructure, such as the top of the GIS building and larger electrical infrastructure, such as the harmonic filters, will be partially apparent in the backdrop to the village, beyond intervening housing and vegetation in views. Lower lying features such as fencing, access roads, vehicles and SUDs basins will not be visible.</li> </ul>			
Magnitude of change (operation, 15 years post construction):		Medium-low	
<ul style="list-style-type: none"> <li>Mitigation planting will be partially visible in the backdrop to Friston in the views from this section of the B1121 Aldeburgh Road, providing further partial screening of the onshore substation and National Grid substation, however in these views experienced by motorists on the B1121 Aldeburgh Road on the southern edge of Friston, it is not likely to have grown high enough, after 15 years, to screen the taller elements of the electrical infrastructure, which will remain visible in the backdrop to Friston, such that magnitude of change remains medium-low.</li> </ul>			
Significance of effect:			
Receptor: Motorists on B1121	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Section A: Saxmundham to north of Moor Farm (Saxmundham Road)	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Section B: North of Moor Farm to Friston House (Saxmundham Road)	Significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Section C: Friston House through Friston (Saxmundham Road)	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Section D: South of Friston (Aldeburgh Road)	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent

## Grove Road

Motorists travelling on Grove Road	
Representative viewpoints:	Viewpoints 3 and 4
Sensitivity to change:	
Motorists on Grove Road:	Medium
Cyclists on Grove Road:	Medium-high
Magnitude of change:	

Motorists travelling on Grove Road	
Section A: Saxmundham Road to Grove Wood	
Magnitude of change (construction):	Low to negligible (during construction period)
<ul style="list-style-type: none"> <li>Motorists on Grove Road between Saxmundham Road and Grove Wood (Manor Farm) will generally have no views, or at most experience a negligible to low change to their views, due to the construction of the onshore substation and National Grid substation. Views of the construction of the onshore substation and National Grid substation are either screened by hedgerow along this section of Grove Road or screened by the mature woodland at Laurel Covert and around Fareacres Farm. Viewpoint 3 (<b>Figure 29.15</b>) provides a representative example of the likely change in views from this section of Grove Road.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Low to negligible
<ul style="list-style-type: none"> <li>Motorists on Grove Road between Saxmundham Road and Grove Wood (Manor Farm) will generally have no views, or at most experience a negligible to low change to their views, due to the operation of the onshore substation and National Grid substation. Views of the operation of the onshore substation and National Grid substation are either screened by hedgerow along this section of Grove Road or screened by the mature woodland at Laurel Covert and around Fareacres Farm. Viewpoint 3 (<b>Figure 29.15</b>) provides a representative example of the likely change in views from this section of Grove Road.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Low to negligible
<ul style="list-style-type: none"> <li>Motorists on Grove Road between Saxmundham Road and Grove Wood (Manor Farm) will generally have no views, or at most experience a negligible to low change to their views, due to the operation of the onshore substation and National Grid substation. Screening woodland belts to the north of Grove Wood are predicted to have grown to provide further screening in views from this section of Grove Road.</li> </ul>	
Section B: Grove Wood (Manor Farm) to northern edge of Friston	
Magnitude of change (construction):	High (during construction period)
<ul style="list-style-type: none"> <li>Motorists and cyclists on Grove Road between Grove Wood (Manor Farm) and the north edge of Friston will experience a high magnitude of change to views experienced from this section of the road due to the construction of the onshore substation and National Grid substation. The construction of the onshore substation and National Grid substation will be visible in close proximity in the foreground of the views to the immediate west of the road. Changes to view from this section of Grove Road arising from the construction of the onshore substation and National Grid substation will occur due to the scale, extent and close proximity of the GIS buildings and electrical infrastructure taking shape during the construction period, together with construction compounds, fencing, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period. The construction of the onshore cable route into the onshore substation will also be prominent in views from this section of Grove Road. The scale and extent of the construction of the onshore substation and National Grid substation will result in a particularly large change from this localised section of Grove Road, due to the close proximity (0.11km), however the onshore substation and National Grid substation will be partially contained by the mature woodland at Grove Wood/Laurel Covert, the rising landform to the north and will be viewed in the context of the existing National Grid transmission line.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	High
<ul style="list-style-type: none"> <li>Motorists and cyclists on Grove Road between Grove Wood (Manor Farm) and the north edge of Friston will experience a high magnitude of change to views experienced from this section of the road due to the operation of the onshore substation and National Grid substation. Viewpoint 14 provides a representative view (<b>Figure 29.26b</b>) from this closest section of Grove Road at the first year of the operational phase. The operation of the onshore substation and National Grid substation will be visible in close proximity in the foreground of the views to the immediate west of the road. Changes to view from this section of Grove Road arising from the operation of the onshore</li> </ul>	

Motorists travelling on Grove Road	
<p>substation and National Grid substation will occur due to the scale, extent and close proximity of the GIS buildings and electrical infrastructure, such as the GIS buildings and external electrical infrastructure (e.g. harmonic filters and transformers). The scale and extent of the operational onshore substation and National Grid substation will result in a particularly large change from this localised section of Grove Road, due to the close proximity (0.11km), however the onshore substation and National Grid substation will be partially contained by the mature woodland at Grove Wood/Laurel Covert, the rising landform to the north and will be viewed in the context of the existing National Grid transmission line. By the first year of the operational phase, pre-construction woodland planting along Grove Road (<b>Figure 29.12</b>) will occupy the immediate foreground of the view and is assumed to have established and had several years growth during the construction period, but will have limited influence as a screening feature by the first year of the operational phase.</p>	
Magnitude of change (operation, 15 years post construction):	Negligible
<ul style="list-style-type: none"> <li>Mitigation woodland planting between the viewpoint and the onshore substation will be located in the immediate foreground of the view and is predicted to entirely screen the view of the onshore substation and National Grid substation. Viewpoint 14 provides a representative view (<b>Figure 29.26c</b>) from this closest section of Grove Road, 15 years into the operational phase. Mitigation woodland planting which will be in the immediate foreground of the view (directly in front of the viewpoint) as shown in the photomontage in <b>Figure 29.26c</b>, to provide an illustration of the landscape mitigation planting around the onshore substation site.</li> <li>Mitigation planting will reduce the magnitude of change to negligible after approximately 15 years post-construction, when the woodland planting is predicted to have grown to provide screening of the onshore substation and National Grid substation in the view.</li> </ul>	
Section C: Grove Road through Friston	
Magnitude of change (construction):	Low (during construction period)
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the construction of the onshore substation and National Grid substation on views from Grove Road through Friston is assessed as low. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change in views from this section of Grove Road. The construction of the onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees, particularly woodlands within the grounds of Friston House. Only the top of the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible beyond intervening foreground buildings and trees during construction, substantially screened by intervening trees and will only be slightly apparent in views.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Low
<ul style="list-style-type: none"> <li>The magnitude of change resulting from the operation of the onshore substation and National Grid substation on views from Grove Road passing through Friston is assessed as low. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change in views from this section of Grove Road. The operational onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees, particularly woodlands within the grounds of Friston House. Only the top of the larger elements of electrical infrastructure will be visible intermittently beyond intervening foreground buildings and trees during operation, substantially screened by intervening trees and will only be slightly apparent in views.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Low
<ul style="list-style-type: none"> <li>Mitigation planting along field boundaries to the north of Friston around the onshore substation and National Grid substation will further reduce visibility of the built infrastructure in views from Grove</li> </ul>	

Motorists travelling on Grove Road			
Road through Friston, with the magnitude of change remaining low after 15 years when the woodland planting is predicted to have grown to provide further screening.			
Significance of effect:			
Receptor: Motorists on Grove Road	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Section A: Saxmundham Road to Grove Wood	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Section B: Grove Wood (Manor Farm) to northern edge of Friston	Significant, short-term, temporary	Significant, long-term, temporary	Not significant, long-term, permanent
Section C: Grove Road through Friston	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent

#### 29.4.1.1.4 Recreational Routes

49. An assessment of the visual effects of the onshore substation and National Grid substation from the Suffolk Coastal Cycle Route and the Sandlings Walk (**Figure 29.9**) is presented in the following technical assessment. The visual effects of the onshore substation and National Grid substation have been assessed as not significant on views experienced by people walking and cycling on all other recreational routes in the preliminary assessment in **section 29.2.3.1**.

#### Suffolk Coastal Cycle Route (Regional Route 42)

Cyclists travelling on Suffolk Coastal Cycle Route (Regional Route 42)	
Representative viewpoints:	Viewpoints 3 and 4
Sensitivity to change:	
Cyclists on Suffolk Coastal Cycle Route:	Medium-high
Magnitude of change:	
Section A: Northern edge of study area to Grove Wood	
Magnitude of change (construction):	Low to negligible (during construction period)
<ul style="list-style-type: none"> <li>Cyclists travelling on the Suffolk Coastal Cycle Route between the northern edge of the study area and Grove Wood (Manor Farm) will generally have no views, or at most experience a negligible to low change to their views, due to the construction of the onshore substation and National Grid substation. Views of the construction of the onshore substation and National Grid substation are either screened by hedgerow along the minor roads which the cycle route takes, such as Grove Road, or screened by the mature woodland at Laurel Covert and around Fareacres Farm. Viewpoint 3 (<b>Figure 29.15</b>) provides a representative example of the likely change in views from the Suffolk Coastal Cycle Route from Grove Road on this section of the route.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Low to negligible
<ul style="list-style-type: none"> <li>Cyclists on the Suffolk Coastal Cycle Route between the northern edge of the study area and Grove Wood (Manor Farm) will generally have no views, or at most experience a negligible to low change to their views, due to the operation of the onshore substation and National Grid substation. Views of the operation of the onshore substation and National Grid substation are either screened by hedgerow along the minor roads forming this section of the cycle route or screened by the mature</li> </ul>	

Cyclists travelling on Suffolk Coastal Cycle Route (Regional Route 42)	
woodland at Laurel Covert and around Fareacres Farm. Viewpoint 3 ( <b>Figure 29.15</b> ) provides a representative example of the likely change in views from Grove Road on this section of the route.	
Magnitude of change (operation, 15 years post construction):	Low to negligible
<ul style="list-style-type: none"> <li>Cyclists on the Suffolk Coastal Cycle Route between Saxmundham Road and Grove Wood (Manor Farm) will generally have no views, or at most experience a negligible to low change to their views, due to the operation of the onshore substation and National Grid substation. Screening woodland belts to the north of Grove Wood are predicted to have grown to provide further screening in views from this section of Grove Road.</li> </ul>	
Section B: Grove Wood (Manor Farm) to northern edge of Friston	
Magnitude of change (construction):	High (during construction period)
<ul style="list-style-type: none"> <li>Cyclists on the Suffolk Coastal Cycle Route travelling along Grove Road between Grove Wood (Manor Farm) and the north edge of Friston will experience a high magnitude of change to views experienced from this section of the road due to the construction of the onshore substation and National Grid substation. The construction of the onshore substation and National Grid substation will be visible in close proximity in the foreground of the views to the immediate west of the road. Changes to view from this section of the cycle route along Grove Road arising from the construction of the onshore substation and National Grid substation will occur due to the scale, extent and close proximity of the GIS buildings and electrical infrastructure taking shape during the construction period, together with construction compounds, fencing, machinery, cranes, accommodation and the stockpiling of subsoil/topsoil needed during the construction period. The construction of the onshore cable route into the onshore substation will also be prominent in views from this section of the cycle route. The scale and extent of the construction of the onshore substation and National Grid substation will result in a particularly large change from this localised section of the cycle route along Grove Road, due to the close proximity (0.11km), however the onshore substation and National Grid substation will be partially contained by the mature woodland at Grove Wood/Laurel Covert, the rising landform to the north and will be viewed in the context of the existing National Grid transmission line.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	High
<ul style="list-style-type: none"> <li>Cyclists on the Suffolk Coastal Cycle Route travelling along Grove Road between Grove Wood (Manor Farm) and the north edge of Friston will experience a high magnitude of change to views experienced from this section of the road due to the operation of the onshore substation and National Grid substation. Viewpoint 14 provides a representative view (<b>Figure 29.26b</b>) from this closest section of Grove Road at the first year of the operational phase. The operation of the onshore substation and National Grid substation will be visible in close proximity in the foreground of the views to the immediate west of the road. Changes to view from this section of the cycle route Grove Road arising from the operation of the onshore substation and National Grid substation will occur due to the scale, extent and close proximity of the GIS buildings and electrical infrastructure, such as the GIS buildings and external electrical infrastructure (e.g. harmonic filters and transformers). The scale and extent of the operational onshore substation and National Grid substation will result in a particularly large change from this localised section of the cycle route along Grove Road, due to the close proximity (100m), however the onshore substation and National Grid substation will be partially contained by the mature woodland at Grove Wood/Laurel Covert, the rising landform to the north and will be viewed in the context of the existing National Grid transmission line. By the first year of the operational phase, pre-construction woodland planting along Grove Road (<b>Figure 29.12</b>) will occupy the immediate foreground of the view and is assumed to have established and had several years growth during the construction period, but will have limited influence as a screening feature by the first year of the operational phase.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Negligible
<ul style="list-style-type: none"> <li>Mitigation woodland planting between the viewpoint and the onshore substation will be located in the immediate foreground of the view and is predicted to entirely screen the view of the onshore</li> </ul>	

**Cyclists travelling on Suffolk Coastal Cycle Route (Regional Route 42)**

substation and National Grid substation. Viewpoint 14 provides a representative view (**Figure 29.26c**) from this closest section of Grove Road, 15 years into the operational phase. Mitigation woodland planting which will be in the immediate foreground of the view (directly in front of the viewpoint) as shown in the photomontage in **Figure 29.26c**, to provide an illustration of the landscape mitigation planting around the onshore substation site.

- Mitigation planting will reduce the magnitude of change to negligible after approximately 15 years post-construction, when the woodland planting is predicted to have grown to provide screening of the onshore substation and National Grid substation in the view.

Section C: Grove Road through Friston

Magnitude of change (construction):	Low (during construction period)
-------------------------------------	----------------------------------

- The magnitude of change resulting from the construction of the onshore substation and National Grid substation on views from this section of the Suffolk Coastal Cycle route through Friston is assessed as low. Viewpoint 6 (**Figure 29.18**) provides a representative example of the likely change in views from this section of the cycle route. The construction of the onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees, particularly woodlands within the grounds of Friston House. Only the top of the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible beyond intervening foreground buildings and trees during construction, substantially screened by intervening trees and will only be slightly apparent in views.

Magnitude of change (operation, first year of operational phase):	Low
---	-----

- The magnitude of change resulting from the operation of the onshore substation and National Grid substation on views from this section of the Suffolk Coastal Cycle route passing through Friston is assessed as low. Viewpoint 6 (**Figure 29.18**) provides a representative example of the likely change in views from this section of the Suffolk Coastal Cycle route. The operational onshore substation and National Grid substation will largely be screened by housing in Friston in the foreground and intervening layers of vegetation/trees, particularly woodlands within the grounds of Friston House. Only the top of the larger elements of electrical infrastructure will be visible intermittently beyond intervening foreground buildings and trees during operational, substantially screened by intervening trees and will only be slightly apparent in views.

Magnitude of change (operation, 15 years post construction):	Low
--	-----

- Mitigation planting along field boundaries to the north of Friston around the onshore substation and National Grid substation will further reduce visibility of the built infrastructure in views from Grove Road through Friston, with the magnitude of change remaining low after 15 years when the woodland planting is predicted to have grown to provide further screening.

Significance of effect:

Receptor: Cyclists on Suffolk Coastal Cycle Route	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Section A: Northern edge of study area to Grove Wood	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Section B: Grove Wood (Manor Farm) to northern edge of Friston	Significant, short-term, temporary	Significant, long-term, temporary	Not significant, long-term, permanent
Section C: Suffolk Coastal Cycle Route through Friston	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent

## Sandlings Walk

Walkers on Sandlings Walk	
Representative viewpoints:	Viewpoints 4, 7, 12 and 13
Sensitivity to change:	
Walkers on Sandlings Walk:	High
Magnitude of change:	
Section A: Southern edge of study area at Snape to Friston (Grove Road)	
Magnitude of change (construction):	Low to negligible (during construction period)
<ul style="list-style-type: none"> <li>Walkers on the Sandlings Walk between the southern edge of the study area and Friston (Grove Road) will generally have no views, or at most experience a negligible to low change to their views, due to the construction of the onshore substation and National Grid substation. Views of the construction of the onshore substation and National Grid substation are either screened by hedgerows along the minor roads which the path follows, such as Grove Road, or screened by mature woodland at Friston House and Grove Wood. In the area through Friston the construction of the onshore substation and National Grid substation will largely be screened by housing in the foreground. Only the top of the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible beyond intervening foreground buildings and trees during construction and will only be slightly apparent in views. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change in views from the Sandlings Walk through the village of Friston.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Low to negligible
<ul style="list-style-type: none"> <li>Walkers on the Sandlings Walk between the southern edge of the study area and Friston (Grove Road) will generally have no views, or at most experience a negligible to low change to their views, due to the operation of the onshore substation and National Grid substation. Views of the operational onshore substation and National Grid substation are either screened by hedgerows or mature woodland at Friston House and Grove Wood. In the area between Friston Hall and the edge of Friston, there is some visibility of the taller components of the onshore substations in the backdrop behind Friston, however the magnitude of change would be low due to the relatively limited extent of the substation visible. Through Friston itself, on the Sandlings Walk, the operational onshore substation and National Grid substation will largely be screened by housing in the foreground. Only the top of the larger elements of electrical infrastructure will be visible intermittently beyond intervening foreground buildings and trees during operation, will only be slightly apparent in views. Viewpoint 6 (<b>Figure 29.18</b>) provides a representative example of the likely change in views from the Sandlings Walk through the village of Friston.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Low to negligible
Section B: Friston (Grove Road) to Sloe Lane (Billeaford Hall)	
Magnitude of change (construction):	Low to negligible (during construction period)
<ul style="list-style-type: none"> <li>Walkers on the Sandlings Walk between Friston (Grove Road) and Sloe Lane (Billeaford Hall) will generally have no views or at most a negligible change to their views, due to the construction of the onshore substation and National Grid substation. Views of the construction of the onshore substation and the National Grid substation are largely screened primarily by intervening woodland at Grove Wood as well as by existing housing on the edge of Friston and smaller woodland coverts within the fields between the Sandlings Walk and the onshore substation and National Grid substation construction areas. Only the top of the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible beyond intervening foreground buildings and woodland during construction and they will only be slightly apparent in views. Viewpoint 7 and Viewpoint 12 (<b>Figure 29.19</b> and <b>Figure 29.24</b>) provide representative examples of the likely change</li> </ul>	

Walkers on Sandlings Walk	
in views from the Sandlings Walk within an agricultural field to the north east of Friston and fields on the edge of Knodishall Common respectively.	
Magnitude of change (operation, first year of operational phase):	Low to negligible
<ul style="list-style-type: none"> <li>Walkers on the Sandlings Walk between Friston (Grove Road) and Sloe Lane (Billeaford Hall) will generally have no views or at most a negligible change to their views, during the operation of the onshore substation and National Grid substation. Views of the onshore substation and the National Grid substation are largely screened primarily by intervening woodland at Grove Wood as well as by existing housing on the edge of Friston and smaller woodland coverts within the fields between the Sandlings Walk path and the onshore substation and National Grid substation area. Only the top of the larger elements of electrical infrastructure will be visible intermittently above buildings in the foreground at the edge of Friston. The remainder of the route will be substantially screened by intervening woodland and would not be apparent within views. Viewpoint 7 and Viewpoint 12 (<b>Figure 29.19</b> and <b>Figure 29.24</b>) provide representative examples of the likely change in views from the Sandlings Walk within an agricultural field to the north east of Friston and fields on the edge of Knodishall Common respectively.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Low to negligible
Section C: Sloe Lane (Billeaford Hall) to Aldringham Common	
Magnitude of change (construction):	Low to negligible (during construction period)
<ul style="list-style-type: none"> <li>The distance of this section of the Sandlings Walk between Sloe Lane (Billeaford Hall) and Aldringham Common from the onshore substation and the National grid substation (2.0km from Billeaford Hall and 4.5 km from Adringham), in combination with the presence of intervening woodland and hedgerows means that walkers will have no views or at most a negligible change to their views. Views of the construction of the onshore substation and the National Grid substation are largely screened primarily by intervening woodland at Grove Wood and Great Wood as well as smaller woodland coverts within the fields between the Sandlings Walk path and the onshore substation and National Grid substation construction area. Only the top of the larger elements associated with the construction of the onshore infrastructure, such as cranes and the installation of the larger electrical infrastructure, such as the harmonic filters, will be visible beyond intervening woodland and hedgerows during construction and they would be substantially screened and visible only slightly within the background of any views. Although not located on the Sadling's Walk route, viewpoint 13 (<b>Figure 29.24</b>) provides a representative example of the likely change in views in the first half of this section of the Sandlings Walk.</li> </ul>	
Magnitude of change (operation, first year of operational phase):	Low to negligible
<ul style="list-style-type: none"> <li>The distance of this section of the Sandlings Walk between Sloe Lane (Billeaford Hall) and Aldringham Common from the onshore substation and the National Grid substation (2.0km from Billeaford Hall and 4.5km from Adringham), in combination with the presence of intervening woodland and hedgerows means that walkers will have no views or at most a negligible change to their views. Views of the operational onshore substation and National Grid substation are largely screened primarily by intervening woodland at Grove Wood and Great Wood as well as smaller woodland coverts within the fields between the Sandlings Walk path and the onshore substation and National Grid substation operational area. Only the top of the larger elements of electrical infrastructure, will be visible beyond intervening woodland and hedgerows during operation and they would be substantially screened and visible only slightly within the background of any views. Although not located on the Sandlings Walk route, viewpoint 13 (<b>Figure 29.24</b>) provides a representative example of the likely change in views in the first half of this section of the Sandlings Walk and illustrates the extent to which taller elements will be visible.</li> </ul>	
Magnitude of change (operation, 15 years post construction):	Low to negligible
Section D: Aldringham Common to Sizewell	



Walkers on Sandlings Walk			
Magnitude of change (construction):		Low to negligible (during construction period)	
<ul style="list-style-type: none"> <li>The distance of this section of the Sandlings Walk (&gt;4.5km) to the onshore substation and the National Grid substation as well as the presence of intervening woodland, hedgerows and settlements means that that will be no views or extremely limited views of the construction.</li> </ul>			
Magnitude of change (operation, first year of operational phase):		Low to negligible	
<ul style="list-style-type: none"> <li>The distance of this section of the Sandlings Walk (&gt;4.5km) to the onshore substation and the National Grid substation as well as the presence of intervening woodland, hedgerows and settlements means that that will be no views or extremely limited views during operation.</li> </ul>			
Magnitude of change (operation, 15 years post construction):		Low to negligible	
Section E: Sizewell to northern edge of study area south of East Bridge			
Magnitude of change (construction):		Negligible (during construction period)	
The distance of this section of the Sandlings Walk (between 4.6km and 6.8km) to the onshore substation and the National Grid substation as well as the presence of intervening woodland, hedgerows and the settlement of Leiston means that there will be no views of the construction.			
Magnitude of change (operation, first year of operational phase):		Negligible	
The distance of this section of the Sandlings Walk (between 4.6km and 6.8km) to the onshore substation and the National Grid substation as well as the presence of intervening woodland, hedgerows and the settlement of Leiston means that there will be no views during operation.			
Magnitude of change (operation, 15 years post construction):		Negligible	
Significance of effect:			
Receptor	Significance of effect (construction)	Significance of effect (operation, first year of operational phase)	Significance of effect (operation, 15 years post construction)
Walkers on Sandlings Walk (Section A)	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Walkers on Sandlings Walk (Section B)	Not Significant, short-term, temporary	Not Significant, long-term, temporary	Not significant, long-term, permanent
Walkers on Sandlings Walk (Section C)	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent
Walkers on Sandlings Walk (Section D)	Not Significant, short-term, temporary	Not Significant, long-term, temporary	Not significant, long-term, permanent
Walkers on Sandlings Walk (Section E)	Not significant, short-term, temporary	Not significant, long-term, temporary	Not significant, long-term, permanent

**This page is intentionally blank.**