# **The Great Grid Upgrade**

Eastern Green Link 3 (EGL 3) and Eastern Green Link 4 (EGL 4)



**Volume 1, Part 2, Chapter 8: Landscape and Visual** May 2025



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# 8. Landscape and Visual Amenity

# 8. Landscape and Visual Amenity

# 8.1 Introduction

- 8.1.1 This chapter presents the preliminary findings of the Environmental Impact Assessment (EIA) undertaken to date for the Eastern Green Link 3 (EGL 3) and Eastern Green Link 4 (EGL 4) English Onshore Schemes, with respect to Landscape and Visual amenity. The preliminary assessment is based on information obtained to date. It should be read in conjunction with the description of the Projects provided in Volume 1, Part 1, Chapter 4: Description of the Projects.
- 8.1.2 This chapter describes the methodology used, the datasets that have informed the preliminary assessment, baseline conditions, environmental measures, and the preliminary Landscape and Visual Amenity effects that could result from the English Onshore Scheme during the construction and operation (and maintenance) phases. Specifically, it relates to the English onshore elements of EGL 3 and EGL 4 (the English Onshore Scheme) landward of Mean Low Water Springs (MLWS).
- 8.1.3 This chapter should be read in conjunction with:
  - Volume 1, Part 2, Chapter 6: Biodiversity (due to the close association between some landscape receptors and ecological features (habitats/flora) and the potential for overlapping environmental measures);
  - Volume 1, Part 2, Chapter 7: Cultural Heritage (due to the association between landscape value influenced by the presence of heritage assets);
  - Volume 1, Part 2, Chapter 9: Water Environment (due to the close association between some landscape receptors and water environment features (fluvial and coastal waterbodies) and the potential for overlapping embedded environmental measures)
  - Volume 1, Part 2, Chapter 12: Agriculture and Soils (due to the close association with topography and land use)
  - Volume 1, Part 2, Chapter 12: Traffic and Transport (due to the location and appearance of traffic movement within the landscape);
  - Volume 1, Part 2, Chapter 13: Noise and Vibration (due to the potential association between noise mitigation and landscape mitigation);
  - Volume 1, Part 2, Chapter 16: Health and Wellbeing (due to the association between some landscape receptors and activities that benefit physical and mental health, e.g. exercise, recreation, etc, as well as protective factors for mental health)
  - Volume 1, Part 2, Chapter 17: Socio-Economics, Recreation and Tourism (due to the relationship between recreational opportunities and receptors); and
  - Volume 1, Part 4, Chapter 28: Cumulative Effects (due to the potential for cumulative effects as a result of identified schemes).

- 8.1.4 This chapter is supported by the following figures:
  - Volume 3, Part 1, Figure 1-2: the Projects draft Order Limits
  - Volume 3, Part 2, Figure 8-1: National Landscape Character Areas and Lincolnshire Wolds National Landscape
  - Volume 3, Part 2, Figure 8-2: Local Landscape Character Areas
  - Volume 3, Part 2, Figure 8-3: Representative Viewpoint Locations and
  - Volume 3, Part 2, Figure 8-4: Walpole Options A- D Zones of Theoretical Visibility (ZTV), excluding works to the existing 400 kV overhead Line.
  - Volume 3, Part 2, Figure 8-5: Walpole Options A- D Zones of Theoretical Visibility (ZTV), including works to the existing 400 kV overhead Line.
- 8.1.5 This chapter is supported by the following appendices:
  - Volume 2, Part 1, Appendix 1.2.A: Regulatory and Planning Context;
  - Volume 2, Part 1, Appendix 1.5.A: Outline Register of Design Measures
  - Volume 2, Part 1, Appendix 1.5.B: Outline Code of Construction Practice (CoCP);
  - Volume 2, Part 2, Appendix 2.8.A: Landscape and Visual Assessment Methodology;
  - Volume 2, Part 2, Appendix 2.8.B: Landscape Character Baseline and Assessment; and
  - Volume 2, Part 2, Appendix 2.8.C: Preliminary Visual Baseline and Assessment

#### Limitations

- 8.1.6 The information provided in this Preliminary Environment Information Report (PEIR) is preliminary; the final assessment of potential significant effects will be reported in the Environmental Statement (ES). The PEIR has been produced to fulfil National Grid Electricity Transmission's (NGET) consultation duties in accordance with Section 42 of the Planning Act (2008) (Ref. 8.1) and enables consultees to develop an informed view of the preliminary potential significant effects of the English Onshore Scheme.
- 8.1.7 The scope of the Landscape and Visual Impact Assessment (LVIA) is based upon development parameters that include the maximum extent of new development within the draft Order Limits (see: Volume 3, Part 1, Figure 1-2: the Projects draft Order Limits) and the maximum heights of the English Onshore Scheme infrastructure outlined in Volume 1, Part 1, Chapter 4: Description of the Projects which outline the maximum heights of key components associated with the indicative Walpole B Substation (including the Cable Sealing End Compound (CSEC) and Overhead Line (OHL) diversion) and the Walpole converter stations. These height parameters were used to inform the Zone of Theoretical Visibility (ZTV) for the indicative Walpole B Substation and Walpole converter station options.
- 8.1.8 At this stage, a preliminary visual assessment has been undertaken to allow for design flexibility in the context of the indicative zone for underground cable assets, the Walpole converter station Options A-D and indicative Walpole B Substation including the CSEC and works to the existing 400 kV overhead line. Detailed assessments will

- be undertaken for the ES following the selection of the preferred option and on further design refinement.
- 8.1.9 The temporary quay (see: **Volume 1, Part 1, Chapter 4: Description of the Projects**) is an option within the Project's design at this stage. Subject to further optioneering, should it remain part of the design, it will be assessed within the ES, but there is insufficient information to do this at this stage.
- 8.1.10 Night-time lighting is anticipated during the construction phase of the Projects, and during operation for the Walpole converter stations (event activated external lighting for safety and security purposes and to facilitate maintenance or repair works during the hours of darkness or low light) and for the indicative Walpole B Substation (for safe movement and the operation of equipment and event activated for security purposes). Further information regarding the lighting design requirements will be provided within the project description within the ES.
- 8.1.11 The extent of vegetation loss experienced as a result of the Projects is likely to be influenced by further design refinement (for example the provision of additional trenchless crossings, requirements for passing bays on haul roads and/or the modification of road junctions to facilitate access). Further information regarding the full extent of vegetation clearance requirements will be provided within the project description within the ES.

# **Preliminary Significance Conclusions**

- 8.1.12 For ease of reference, a summary of the potentially significant effects from the preliminary Landscape and Visual Amenity Assessment is provided in **Table 8-1** and **Table 8-2**.
- 8.1.13 The preliminary assessment for effects on landscape character references the parameters of landscape sensitivity for each landscape character unit, the predicted magnitude of change to identify landscape receptors affected significantly and not significantly on the scale of major adverse (significant), moderate adverse (potentially significant)minor adverse (not significant) and negligible adverse (not significant). These effects were identified at the construction and operational phases (year 0 and year 15). Landscape receptors include Landscape Character Areas (LCA), Landscape Character Types (LCT) and National Character Areas (NCA).
- 8.1.14 The preliminary assessment for visual amenity has considered the likelihood of potential significant effects, where the magnitude of change experienced by highly sensitive visual receptors is judged to be of a medium or high level and which would consequently result in a potentially significant effect. Distinctions between potential significant effect ratings (moderate / major adverse) on visual receptors have not been made in this PEIR but will be reported in the detailed assessment for the ES.
- 8.1.15 All other effects in relation to Landscape and Visual Amenity have been assessed at this stage as not significant. Further details of the methodology behind the assessment and a detailed narrative of the assessment itself are provided within the Appendices Volume 2, Part 2, Appendix 2.8.A: Landscape and Visual Assessment Methodology, Volume 2, Part 2, Appendix 2.8.B: Landscape Character Baseline and Assessment, and Volume 2, Part 2, Appendix 2.8.C: Preliminary Visual Baseline and Assessment.

**Table 8-1 - Preliminary Summary of Significance of Landscape Effects** 

Receptor <sup>1</sup>	Sensitivity/ importance/ value of receptor <sup>2</sup>	Magnitude of change <sup>3</sup>	Significance <sup>4</sup>	Summary rationale
Construction				
Lincolnshire Coast and Marshes NCA	High	Medium	Major adverse (significant)	A substantial change to the landscape character
Landscape effects on The Fens NCA	High	Medium	Major adverse (significant)	A substantial change to the landscape character
Donna Nook to Gibraltar Point Naturalistic Coast LCA	High	High	Major adverse (significant)	A substantial change to the landscape character
Tetney Lock to Skegness Coastal Outmarsh LCA	Medium	Medium	Moderate adverse (significant)	A considerable change to the landscape character
Holton le Clay to Great Steeping Middle Marsh LCA	High	Medium	Moderate adverse (significant)	A considerable change to the landscape character
Ridges and Valleys of the South-West LCA	High	Medium	Major adverse (significant)	A substantial change to the landscape character
Mareham to Little Steeping Fenside Woodland and Farmland LCA	High	Medium	Major adverse (significant)	A substantial change to the landscape character
Stickney to Sibsey Reclaimed Fen LCA	Medium	High	Major adverse (significant)	A substantial change to the landscape character
Wrangle Common to Freiston Ings Reclaimed Fen LCA	Medium	Medium	Moderate adverse	A considerable change to the landscape character

Receptor <sup>1</sup>	Sensitivity/ importance/ value of receptor <sup>2</sup>	Magnitude of change <sup>3</sup>	Significance <sup>4</sup>	Summary rationale
			(significant)	
Holland Reclaimed Fen LCA	Medium	High	Major adverse (significant)	A substantial change to the landscape character
Bicker to Wyberton Settled Fen LCA	Medium	Medium	Moderate adverse (significant)	A considerable change to the landscape character
Frampton to Fosdyke Settled Fen LCA	Medium	High	Major adverse (significant)	A substantial change to the landscape character
Settled Fens LCT	Medium	High	Major adverse (significant)	A substantial change to the landscape character
Terrington St. John LCA (Walpole con	verter station options)			
Walpole Option A	Medium	High	Major adverse (significant)	A substantial change to the landscape character
Walpole Option B	Medium	Medium	Moderate adverse (significant)	A considerable change to the landscape character
Walpole Option C	Medium	High	Major adverse (significant)	A substantial change to the landscape character
Walpole Option D	Medium	High	Major adverse (significant)	A substantial change to the landscape character

Receptor <sup>1</sup>	Sensitivity/ importance/ value of receptor <sup>2</sup>	Magnitude of change <sup>3</sup>	Significance <sup>4</sup>	Summary rationale	
Indicative zone for underground cable assets and draft Order Limits	Medium	High	Major adverse (significant)	A substantial change to the landscape character	
Operation					
Year 1					
Landscape effects on The Fens NCA	High	Medium	Moderate adverse (significant)	A substantial change to the landscape character	
Mareham to Little Steeping Fenside Woodland and Farmland LCA	High	Low	Moderate adverse (significant)	A considerable change to the landscape character	
Terrington St. John LCA (Walpole conv	verter station options)				
Walpole Option A	Medium	Medium	Moderate adverse (significant)	A considerable change to the landscape character	
Walpole Option B	Medium	Medium	Moderate adverse (significant)	A considerable change to the landscape character	
Walpole Option C	Medium	High	Major adverse (significant)	A substantial change to the landscape character	
Walpole Option D	Medium	High	Major adverse (significant)	A substantial change to the landscape character	
Indicative zone for underground cable assets and draft Order Limits	High	Medium	Major adverse (significant)	A substantial change to the landscape character	

Receptor <sup>1</sup>	Sensitivity/ importance/ value of receptor <sup>2</sup>	Magnitude of change <sup>3</sup>	Significance <sup>4</sup>	Summary rationale	
Year 15					
Terrington St. John LCA (Walpole con	verter station options)				
Walpole Option A	Medium	Medium	Moderate adverse (significant)	A considerable change to the landscape character	
Walpole Option B	Medium	Medium	Moderate adverse (significant)	A considerable change to the landscape character	
Walpole Option C	Medium	High	Major adverse (significant)	A substantial change to the landscape character	
Walpole Option D	Medium	High	Major adverse (significant)	A substantial change to the landscape character	
Indicative zone for underground cable assets and draft Order Limits	High	Medium	Major adverse (significant)	A substantial change to the landscape character	

- 1. The table includes only receptors predicted to be significantly affected. Some receptors may be significantly affected for all or only some of the phases of temporal scope. Therefore, if a receptor is predicted not to be not significantly affected at a particular phase, it is not included in this table.
- 2. The sensitivity/importance/value of a receptor is defined using the criteria set out in **Volume 2**, **Part 2**, **Appendix 2.8.A: Landscape and Visual Assessment Methodology** and is defined as negligible, low, medium, and high.
- 3. The magnitude of change on a receptor resulting from activities relating to the development is defined using the criteria set out in in **Volume 2**, **Part 2**, **Appendix 2.8.A: Landscape and Visual Assessment Methodology** and is defined as negligible, low, medium, and high.
- 4. The significance of the environmental effects is based on the combination of the sensitivity/importance/value of a receptor and the magnitude of change and is expressed as major (significant), moderate (potentially significant) or minor/negligible (not significant), subject to the evaluation methodology outlined in in Volume 2, Part 2, Appendix 2.8.A: Landscape and Visual Assessment Methodology

**Table 8-2 - Preliminary Summary of Potential Significant Effects on Visual Amenity** 

Receptor Locations <sup>1</sup>	Sensitivity crit	eria:	Significant effects and Summary rationale (based on an assumed		
	View Value Susceptibility		medium or high magnitude of change experienced) <sup>2</sup>		
Construction					
Landscape Section 1: Ar	nderby Creek Land	fall - Thurlby			
Anderby Creek	•		Residents and recreational users of footpaths (including the England Coasta		
<ul><li>Huttoft Bank</li></ul>	High or Medium		Path) in each of the receptor locations, due to open near or middle-distance views of construction activity relating to the indicative zone for underground		
<ul><li>Anderby</li></ul>			cable assets.		
<ul><li>Huttoft</li></ul>					
<ul><li>Thurlby</li></ul>					
<ul><li>Mumby</li></ul>					
Landscape Section 2: Th	nurlby - Welton le N	/larsh			
<ul> <li>Cumberworth</li> </ul>	Medium	High	Residents and recreational users of footpaths in each of the receptor		
<ul><li>Farlesthorpe and Bonthorpe</li></ul>			locations, due to open near or middle-distance views of construction activity relating to the indicative zone for underground cable assets.		
<ul><li>Willoughby and Sloothby</li></ul>					
<ul> <li>Welton Le Marsh</li> </ul>					
Landscape Section 3: W	/elton le Marsh - Lit	tle Steeping			
• Orby	High or	High	Residents and recreational users of footpaths in each of the receptor		
Candlesby	Medium		locations, visitors to recreational facilities (including Gunby Estate and Candlesby Park) due to open near or middle-distance views of construction		
<ul> <li>Gunby</li> </ul>			activity relating to the indicative zone for underground cable assets.		

Receptor Locations <sup>1</sup>	Sensitivity cr	iteria:	Significant effects and Summary rationale (based on an assumed		
	View Value	Susceptibility	<b>medium</b> or <b>high</b> magnitude of change experienced) <sup>2</sup>		
Great Steeping					
Landscape Section 4: Little	e Steeping - Sik	osey Northlands			
Little Steeping	Medium	High	Residents and recreational users of footpaths in each of the receptor		
<ul> <li>Midville</li> </ul>			locations and boat users along Witham Navigable Drain – Hobhole Drain and Bell Water Drain, due to open near or middle-distance views of construction		
<ul> <li>Hobhole</li> </ul>			activity relating to indicative zone for underground cable assets.		
<ul> <li>Sibsey</li> </ul>					
Landscape Section 5: Sibs	sey Northlands	- Hubbert's Brid	ge		
• Sibsey	Medium	Medium High	Residents, users of recreational facilities (including Bridge Farm Caravan Park, Half Bridge at Anton's Gowt), recreational users of footpaths and cycle routes (National Cycle Network Route 1 (NCN1) in each of the receptor		
<ul> <li>Frithville</li> </ul>					
<ul> <li>Frith Bank / Anton's Gowt</li> </ul>			locations and for navigational users of the River Witham, due to open near or middle-distance views of construction activity relating to the indicative zone		
Boston West / South     Forty Foot Drain			for underground cable assets.		
Landscape Section 6: Hub	bert's Bridge -	Moulton Sea's E	ind		
Hubbert's Bridge	Medium	High	Residents and recreational users of footpaths (including the Cross Britain		
<ul> <li>Kirton End / Kirton Meeres</li> </ul>			Way and Macmillan Way) in each of the receptor locations, due to open near or middle-distance views of construction activity relating to the indicative zone for underground cable assets.		
<ul> <li>Fishmere</li> </ul>					
<ul> <li>Sutterton</li> </ul>					
<ul> <li>Algarkirk</li> </ul>					

Receptor Locations <sup>1</sup>	Sensitivity criteria:  View Value Susceptibility		Significant effects and Summary rationale (based on an assumed
			medium or high magnitude of change experienced) <sup>2</sup>
Fosdyke / Fosdyke Bridge			
_andscape Section 7: Mou	ulton Sea's End	- Foul Anchor	
Moulton Sea's End	Medium	High	Residents and recreational users of footpaths and cycle routes (NCN1) in
Holbeach Clough			each of the receptor locations, due to open with near or middle-distance views of construction activity relating to the indicative zone for underground
Holbeach Marsh			cable assets.
Holbeach - Fleet Hargate			
Fleet Fen			
Gedney Fen			
Tydd St Mary			
Tydd Gote and Foul Anchor			
andscape Section 8: Fou	ıl Anchor – Wal	pole (Indicative z	zone for converter stations and indicative Walpole B substation)
Foul Anchor, Tydd Gote and Four Gotes	Medium	High	Residents and recreational users of footpaths due to open views of construction activity for the indicative zone for converter stations for Option A, C and D.
			Residents and recreational users of footpaths with near or middle-distance views of construction activity relating to the indicative zone for underground cable assets.
River Nene	Medium	High	Recreational users of the Nene Way and navigational users of the River Nene, due to open views of construction activity for the indicative zone for converter stations for Options C and D.

Receptor Locations <sup>1</sup>			Significant effects and Summary rationale (based on an assumed		
	View Value Susceptibility		<b>medium</b> or <b>high</b> magnitude of change experienced) <sup>2</sup>		
			Recreational users of the Nene Way and navigational users of the River Nene due to near or middle-distance views of construction activity relating to the indicative zone for underground cable assets.		
Walpole Marsh	Medium	High	Residential and recreational receptors due to open views of construction activity for the indicative zone for converter stations for Options A, B, C and D.		
			Residential and recreational receptors to the western fringe of Walpole Marsh due to open views towards the indicative zone for underground cable assets crossing of the River Nene north of the North Level Main.		
• Ingleborough	Medium	High	Residential and recreational receptors due to open views of construction activity for the indicative zone for converter stations for Options A, B, C and D, in particular that those near Ingleborough village for Option D. Residents and recreational users of footpaths due to near or middle-distance views of construction activity relating to the indicative zone for underground cable assets.		
West Walton	Medium	High	Residential and recreational receptors due to open views of construction activity for the indicative zone for converter stations for Options A and D. Residents and recreational users of footpaths due to near or middle-distance views of construction activity relating to the indicative zone for underground cable assets.		
Walton Highway	Medium	High	Residential and recreational receptors on the northernmost fringes of the village due to open views of construction activity for indicative Walpole B Substation and the overhead powerline connection, and with potential near or middle-distance views of construction activity relating to the indicative zone for underground cable assets.		
<ul><li>West Drove North,</li><li>Faulkner House</li></ul>	Medium	High	Residential and recreational receptors on the easternmost fringes of Walton Highway due to open views towards construction activity in relation to indicative Walpole B Substation and the overhead powerline connection, and		

Receptor Locations <sup>1</sup>				Significant effects and Summary rationale (based on an assumed
		View Value Susceptibility		<b>medium</b> or <b>high</b> magnitude of change experienced) <sup>2</sup>
				to the easternmost indicative zone for converter stations (West Drove Road) for Options A, B and D.
•	West Drove North, Thorn Moor Field	Medium	High	Residential and recreational receptors due to open views towards construction activity in relation to the easternmost indicative zone for converter stations (West Drove Road) for Options A, B and C and towards the indicative Walpole B Substation and the overhead powerline connection; and distant construction activity in relation to the Walpole Option D (locations to the east and west of Ingleborough).
•	Walpole St Peter	Medium	High	Residential receptors due to open views of construction activity for the indicative zone for converter stations for Options A, B, C and D and in relation to the indicative Walpole B Substation and the works to the existing 400 kV overhead line.
•	Mill Road, Church End	Medium	High	Residential receptors due to open views of construction activity for the indicative zone for converter stations for Options A, B, C and D due to the visibility of the indicative converter station siting as skyline features during construction; in particular for Option B (both converter stations sited at West Drove North), and in relation to the indicative Walpole B Substation and the works to the existing 400 kV overhead line.
Ор	eration (Years 1 and	15)		
Lar	ndscape Section 6: Hu	ıbbert's Bridge -	Moulton Seas E	nd
•	Kirton End / Kirton Meeres	Medium	High	Effects at Year 1 for residential receptors where cleared hedgerow / roadside vegetation at the B1391 Donington Road, B1192 Holmes Lane and Kirton Holme Road would be distinctly noticeable within views.
Lar	ndscape Section 8: Fo	ul Anchor – Wal <sub>l</sub>	pole (Indicative 2	zone for converter Stations and indicative Walpole B Substation)
•	Foul Anchor, Tydd Gote and Four Gote	Medium	High	Residential and recreational receptors with open views towards each of the indicative zones for converter stations for Options A, C and D.

Receptor Locations <sup>1</sup>		Sensitivity cr	iteria:	Significant effects and Summary rationale (based on an assumed	
		View Value Susceptibility		<b>medium</b> or <b>high</b> magnitude of change experienced) <sup>2</sup>	
•	River Nene	Medium	High	Recreational receptors with open views towards each of the indicative zone for converter stations for Options C and D.	
•	Walpole Marsh	Medium	High	Residential and recreational receptors with open views towards each of the indicative zone for converter stations for Options A, B, C and D.	
•	Ingleborough	Medium	High	Residential and recreational receptors with open views towards each of the indicative zone for converter stations for Options A, C and D.  Residential and recreational receptors greater distance views towards indicative zone for converter stations for Option B (both sited at West Drove North) where the structures would be visible as skyline features.	
•	West Walton	Medium	High	Residential and recreational receptors due to open views towards each of the indicative zone for converter stations for Options A and D.	
•	Walton Highway	Medium	High	Residential and recreational receptors on the northernmost fringes of Walton Highway, due to open views towards the indicative Walpole B Substation and the works to the existing 400 kV overhead line.	
•	West Drove North, Faulkner House	Medium	High	Residential and recreational receptors on the easternmost fringes of Walton Highway due to open views towards the indicative Walpole B Substation and the works to the existing 400 kV overhead line, and the easternmost indicative zone for converter stations (West Drove Road) for Options A, B and D.	
•	West Drove North, Thorn Moor Field	Medium	High	Residential and recreational receptors due to open views towards the indicative zone for converter stations (at West Drove Road) for Options A, B and C.	
•	Walpole St Peter	Medium	High	Residential receptors on the southern fringes of Walpole St Peter due to open views towards the indicative zone for converter stations for Options A, B, C and D; in particular for Option B due to the closer location of the indicative converter station siting (both sited at West Drove North). The indicative Walpole B Substation would be visible as a far-distant aspect of view.	

Receptor Locations <sup>1</sup>				Significant effects and Summary rationale (based on an assumed	
		View Value	Susceptibility	<b>medium</b> or <b>high</b> magnitude of change experienced) <sup>2</sup>	
•	Mill Road, Church End	Medium	High	Residential receptors due to open views towards each of the indicative zone for converter stations for Options A, B, C and D, and to the indicative Walpole B Substation.	

- 1. For details of receptor locations and description of the receptor sections (referred to as Landscape Sections) listed above, please see **Section** Overall Baseline**8.5**.
- 2. Distinctions between potential significant effect ratings (moderate / major adverse) on visual receptors have not been made in this PEIR and all effects listed in the above table include effects which are significant. The level of significance will be reported in the detailed assessment for the ES.

#### 8.2 Relevant Technical Guidance

8.2.1 The legislation and planning policy which has informed the assessment of effects with respect to landscape and visual amenity is provided within Volume 2, Part 1, Appendix 2-1 Legislation and Policy Overview. Further information on policies relevant to the English Onshore Scheme is provided in Volume 1, Part 1, Chapter 2: Regulatory and Policy Overview. Relevant technical guidance, specific to landscape and visual amenity that has informed this PEIR and will inform the assessment within the ES, is summarised below.

#### **Technical Guidance**

8.2.2 A summary of the technical guidance for landscape and visual amenity is given in **Table 8-3**.

**Table 8-3 - Technical Guidance Relevant To The Landscape And Visual Amenity Assessment** 

Technical guidance document	Context
Landscape Institute and the Institute of Environmental Management and Assessment (IEMA) (2013) Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA 3) (Ref. 8.2)	The third edition of this guidance (known as GLVIA 3) is regarded as the 'industry standard' document guiding LVIA. GLVIA 3 provides the framework for assessing Landscape and Visual effects.
Natural England (2014) An approach to Landscape Character Assessment (Ref. 8.3)	Provides supplementary guidance, outlining the framework for undertaking Landscape Character Assessment, in conjunction with GLVIA3 (Ref. 8.2)
Landscape Institute (2024) Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA 3) (Ref. 8.4)	Provides clarifications to GLVIA 3, supplementing the GLVIA 3 guidelines
Landscape Institute (2021) Technical Guidance Note (TGN): Assessing Landscape Value outside National Designations (Ref. 8.5)	The guidance sets out the approaches to assessing landscape value outside national landscape designations.
Landscape Institute TGN 06/19 (2019) Visual Representation of Development Proposals (Ref. 8.6)	The guidance note covers the technical parameters associated with the presentation of different types of visualisations, including annotated photographs, wirelines and photomontages.
Landscape Institute TGN 01/17 (2017) Tranquillity – An overview (Ref. 8.7)	Provides an overview of tranquillity, including etymology, research, policy background and tranquillity assessment in practice.
Landscape Institute TGN 04/20 (2000) Infrastructure (Ref. 8.8)	Sets out the role of the Landscape Professional in the planning, design and management of infrastructure projects and

Technical guidance document	Context
	provides a summary of existing technical guidance.

# 8.3 Consultation and Engagement

#### Overview

- 8.3.1 The assessment has been informed by consultation responses and ongoing stakeholder engagement. An overview of the approach to consultation is provided in **Section 5.9** of **Volume 1, Part 1, Chapter 5: PEIR Approach and Methodology**.
- 8.3.2 A Scoping Opinion was adopted by the Secretary of State, administered by the Planning Inspectorate, on 05 September 2024. A summary of the relevant responses received in the Scoping Opinion in relation to landscape and visual amenity, and confirmation of how these have been addressed within the assessment to date, is presented in **Table 8-4**.
- 8.3.3 Since issue of the Scoping Opinion changes to the Projects design has resulted in Fenland District Council and Cambridgeshire County Council falling within the draft Order Limits. Whilst the preliminary assessment has taken account of the relevant baseline information for these local planning authorities the scope of the assessment remains unchanged.
- 8.3.4 The information provided in the PEIR is preliminary, and not all the Scoping Opinion comments have been addressed at this stage, however, all comments will be addressed within the ES.

Table 8-4 - Summary of EIA Scoping Opinion responses for Landscape and Visual

Consultee	Consideration	How addressed in this PEIR
The Planning Inspectorate	Advised to seek agreement on the extent of the study area with relevant statutory bodies.	The Applicant acknowledges comments regarding the extent of the study area included in the Scoping Opinion. Following the issue of the PEIR, there will be another opportunity to provide comments regarding the extent of the study area and to seek agreement with relevant statutory bodies.
The Planning Inspectorate	ES to include justification of the study area extent based on the worst-case scenario and receptors likely to experience potential significant effects.	Included in the PEIR (within Landscape Section Study Area).

Consultee	Consideration	How addressed in this PEIR
The Planning Inspectorate	Requested assessment of decommissioning impacts for landscape and visual receptors.	For the purposes of this EIA, it is proposed that decommissioning effects are not assessed in detail at this stage because there are no current plans to decommission the Projects. However, Table 4.21 in Volume 1, Part 1, Chapter 4: Description of the Projects summarises the assessment of the likely potential significant effects associated with decommissioning with respect to landscape and visual receptors.  Decommissioning effects are likely to be no greater than those identified for construction stage.
The Planning Inspectorate	Requested consideration of Residential Visual Amenity Assessment (RVAA) for significantly affected residential receptors.	The Applicant agrees that RVAAs will be considered in situations where potential significant effects on residential receptors are predicted above a residential amenity threshold, subject to discussion and agreement with relevant consultation bodies.  Opinion from Local Planning Authorities (LPAs) will be sought on the requirement for RVAAs based on PEIR assessment content.
The Planning Inspectorate	Requested reference to National Character Areas in the baseline descriptions.	Included in the PEIR.
Dewar Planning on behalf of Boston Borough Council, South Holland District Council and East Lindsey District Council	Requested RVAA for significantly affected residential receptors.	The Applicant acknowledges that RVAAs will be considered in situations where potential significant effects on residential receptors are predicted, subject to discussion and agreement with relevant consultation bodies.  Opinion from LPAs will be sought on the requirement for RVAAs based on PEIR assessment content.
Dewar Planning on behalf of Boston Borough Council, South Holland	Requested submission of viewpoints for consultation alongside supporting ZTV.	Representative viewpoints and supporting ZTV (for indicative zone for converter stations and indicative Walpole B Substation)

Consultee	Consideration	How addressed in this PEIR
District Council and East Lindsey District Council		are included within the PEIR (refer to Volume 3, Part 2, Figure 8.3: Representative Viewpoint Locations, Volume 3, Part 2, Figure 8-4: Walpole Options A-D Zones of Theoretical Visibility (ZTV), excluding works to the existing 400 kV overhead Line and Volume 3, Part 2, Figure 8-5: Walpole Options A-D Zones of Theoretical Visibility (ZTV), including works to the existing 400 kV overhead Line) and further opinion will be sought from consultees.
Dewar Planning on behalf of Boston Borough Council, South Holland District Council and East Lindsey District Council	Proposed scoping in lighting effects at the construction stage.	The applicant acknowledges that lighting effects during construction (and during operation for the indicative zone for converter stations and indicative Walpole B Substation while not assessed within the PEIR, will be scoped in and assessed at ES stage.
Dewar Planning on behalf of Boston Borough Council, South Holland District Council and East Lindsey District Council	Requested consultation on methodology.	The methodology will be shared with consultees through the issue of the PEIR and consulted upon.
Dewar Planning on behalf of Boston Borough Council, South Holland District Council and East Lindsey District Council	Requested methodology details on the produced ZTVs.	The methodology detail is included within the PEIR (refer to Volume 2, Part 2, Appendix 2.8.A: Landscape and Visual Assessment Methodology).
Dewar Planning on behalf of Boston Borough Council, South Holland District Council and East Lindsey District Council	Requested visual representations in line with the Visual Representation of Development Proposals TGN 06/19 (Ref 8.6) published by the Landscape Institute.	The applicant acknowledges that visual representations, while not produced for the PEIR, will be undertaken in line with the Visual Representation of Development Proposals TGN 06/19 published by the Landscape Institute.

Consultee	Consideration	How addressed in this PEIR
Dewar Planning on behalf of Boston Borough Council, South Holland District Council and East Lindsey District Council	Requested assessment of impacts on National Character Area Profiles (Ref 8.13).	
AAH Consultants on behalf of Lincolnshire County Council	Requested that LVIA is carried out in accordance with a range of relevant technical guidance documents alongside a typical structure of the LVIA.	The Applicant acknowledges this request and is implemented in the PEIR.
AAH Consultants on behalf of Lincolnshire County Council	Requested that the methodology should follow the GLVIA 3 <sup>rd</sup> edition. (Ref. 8.4).	The Applicant acknowledges this request and is implemented in the PEIR. (refer to Volume 2, Part 2, Appendix 2.8.A: Landscape and Visual Assessment Methodology).
AAH Consultants on behalf of Lincolnshire County Council	Require review of the study of the area as design information becomes available.	The Applicant acknowledges this requirement, implemented within the PEIR (within study area) and to be further reviewed towards the ES stage.
AAH Consultants on behalf of Lincolnshire County Council	Require assessment of effects on a range of scales.	Included in the PEIR preliminary assessment.
AAH Consultants on behalf of Lincolnshire County Council	Requested assessment of cumulative effects with reference to similar energy and renewable energy infrastructure, including combined and sequential views, Grimsby to Walpole (onshore) proposal, where routes converge and other schemes, including solar farms.	A cumulative assessment will be undertaken at the ES stage.
Natural England	Requested consideration of effects on Lincolnshire Wolds National Landscape during construction and operation and the purpose of designation, conservation and enhancement of natural beauty.	The Applicant acknowledges the request and this is included in the PEIR.
Natural England and the	Highlighted key qualities, aspiration to designate sections of Heritage	The Applicant acknowledges that the Projects will marginally affect
National Grid   May 2025	Preliminary Environmental Information Report	19

Consultee	Consideration	How addressed in this PEIR
Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB) Partnership joint working response	Coast alongside potential for direct and indirect effects on the setting.	the coastal landscape near Anderby Creek; there is an assumption of high landscape value adopted for the coastal landscape description unit.
Appendix A of the King's Lynn & West the Lincolnshire Wolds National Landscape and Landscape Character Council: Response to the internal technical officer consultations  Requested assessment of impacts on the Lincolnshire Wolds National Landscape and Landscape Character Areas identified within King's Lynn and West Norfolk Borough Landscape Character Assessment, affected directly (Ref 8.23).		requirement and this included in

# **Technical Engagement**

8.3.5 Technical engagement with consultees in relation to the landscape and visual aspects is ongoing. A summary of the technical engagement undertaken to date is outlined in **Table 8-5**.

**Table 8-5 - Technical Engagement on the Environmental Aspect Assessment** 

Consultee	Consideration	How addressed in this PEIR
Lincolnshire Wolds Management Board	A meeting with the Lincolnshire Wolds Management Board held on 22 January 2025 to explain the approach to routeing and siting work and the construction approach in relation to the Lincolnshire Wolds. In addition, the meeting sought to discuss initial viewpoint's locations for assessment of the Projects in proximity to the Lincolnshire Wolds.	This PEIR provides locations of representative viewpoints for assessment of the Projects.
National Trust	A meeting with the National Trust on 26 February 2025 to provide updates on the design evolution of the Projects and construction approach in relation to National Trust land. In addition, the meeting sought to discuss initial viewpoint's locations for assessment of the Projects in proximity to the National Trust land at the Anderby Creek landfall and at Gunby Estate.	This PEIR provides locations of representative viewpoints for assessment of the Projects.

<sup>8.3.6</sup> Further engagement with the above consultees and any other relevant consultees (for example, Natural England) as well as with local planning authorities, Parish Councils and the communities will continue to inform the ES through the formal consultation process.

8.3.7 Consultations with local planning authorities will seek to ensure collaborative agreement on the methodologies adopted the selection of representative viewpoints and the content of visualisations. Statements of Common Ground will be used to record engagement and ongoing discussions with all stakeholders throughout the Development Consent Order (DCO) process.

# 8.4 Data Gathering Methodology

- 8.4.1 Data relevant to the landscape character baseline has been gathered initially through desktop research of available and published landscape character assessments at the local, regional, and national levels. Following the desktop studies, a series of walkover surveys have been undertaken to gain a more detailed understanding of key landscape qualities that may be affected by the English Onshore Scheme. Baseline studies have also been informed by cross—topic collaboration with the ecology and heritage teams and other published reports relevant to landscape character, such as Lincolnshire Historic Landscape Characterisation (HLC) (Ref. 8.9).
- 8.4.2 Landscape character mapping data was obtained directly from published online sources or requested directly from the local planning authorities. In the case of South Holland District Council, as there is no published landscape character assessment available, the boundaries of landscape character description units have been identified based on the Strategic Landscape Capacity Study (Ref. 8.10).
- 8.4.3 The visual baseline has been informed by initial desktop studies, field work and stakeholder engagement, as demonstrated by the comments obtained following the issue of the Scoping Opinion and subsequent engagement with some of the stakeholders, such as Lincolnshire Wolds National Landscape. The information gathered has helped to inform the spatial scope for the study area and to enable the identification of representative viewpoint locations in support of the assessment.

# **Study Area**

- 8.4.4 The GLVIA 3 (Ref 8.4) clarifies how study areas should be determined on a project specific basis. Paragraph 5.2 of GLVIA 3 states that the study area extent should be "... based on the extent of Landscape Character Areas likely to be significantly affected either directly or indirectly" or "on the extent of the area from which the development is potentially visible, defined as the Zone of Theoretical Visibility, or a combination of the two."
- 8.4.5 The study area for the landscape and visual assessment of the English Onshore Scheme comprises:
  - An area of 2 kilometres (km) from the Landscape Section of the English Onshore Scheme draft Order Limits, which extends from the Anderby Creek Landfall to the River Nene and accommodates the Indicative Transition Joint Bay siting area and the indicative zone for underground cable assets (for the HVDC underground cables).
  - An area of 3 km beyond the English Onshore Scheme draft Order Limits for the
    proposed indicative zone for converter stations i.e., the Landscape section of the
    draft Order limits within which the indicative Walpole B Substation (including
    associated works to existing 400 kV overhead lines and the CSEC, and the
    indicative zone for converter stations are located

- 8.4.6 For the assessment of effects on landscape character, the full geographical extent of any landscape character description units overlapping the study area buffer has been considered as part of the assessment.
- 8.4.7 Preliminary ZTVs have been generated for the indicative zone for converter stations and indicative Walpole B substation (see Volume 3, Part 2, Figure 8-4: Walpole Options A-D Zones of Theoretical Visibility (ZTV), excluding works to the existing 400 kV overhead Line). These assume a current 'worst-case' scenario and cover the indicative zones for the converter stations plus maximum heights of the proposed converter stations (31.7 m combining a maximum built form of 30 m plus a potential platform height of 1.7 m above ordnance datum (AOD)). The maximum height for the Walpole B Substation is 15 m (overhead line gantries). In addition, Preliminary ZTVs have been generated for the indicative zone for converter stations and indicative Walpole B substation, as well as the works to the existing 400 kV overhead line. These can be found in Volume 3, Part 2, Figure 8-5: Walpole Options A-D Zones of Theoretical Visibility (ZTV), including works to the existing 400 kV overhead Line.
- 8.4.8 ZTVs in relation to the indicative zone for underground cable assets has not been generated as, barring the presence of marker posts / link boxes there is no permanent above ground infrastructure associated with this aspect of the English Onshore Scheme.
- 8.4.9 The ZTVs have been referenced, in combination with further site-based appraisal and additional desk study to consider, using professional judgement, any likelihood of potential significant effects beyond the 2 km and 3 km buffer thresholds and to ensure a proportionate approach is followed which focusses on likely potential significant effects. It is important to note that the study area defines the area within which it is judged that significant landscape and/or visual effects could occur, rather than the full extent of visibility of the English Onshore Scheme.

#### **Desk Study**

8.4.10 A summary of the organisations that have supplied data, together with the nature of that data, is outlined in **Table 8-6**.

Table 8-6 - Data Sources Used to Inform the Landscape and Visual Assessment

Organisation	Data source	Data provided
Ordnance Survey	Digital 1:50,000 Scale Colour Raster mapping resolution. Vectormap District boundary data. (Ref. 8.11)	Baseline information on landscape context, including topography, drainage, settlement pattern, land-use, woodland, promoted recreational routes, transport network and infrastructure.
Environment Agency	Digital terrain model, 2m resolution.	Information used for base heights of the observer points for ZTV generation.

Organisation	Data source	Data provided
Blue Sky International	Digital surface model, 2m photogrammetric.	Information used for basis of ZTV generation.
Google	Google Earth Pro, 2025 (Ref. 8.12)	Baseline information in the plan and street view covers the landscape context, including topography, drainage, settlement pattern, land use, landcover, transport network, and infrastructure.
Natural England	National Landscape Character Area profiles (Ref. 8.13): Lincolnshire Coast and Marshes NCA 42 (Ref. 8.28), Lincolnshire Wolds NCA 43(Ref 8.29), and Central Lincolnshire Vale NCA 44 (Ref. 8.30)	Baseline information on a national level, which sets the landscape context for regional and local level landscape character assessments.
Multi-Agency Geographic Information for the Countryside (MAGIC)	MAGIC interactive map (Ref. 8.14)	Baseline information to inform landscape sensitivity assessment, including details of environmental designations, for example, heritage and ecology, that may influence landscape value.
Long Distance Walkers Association	Long Distance Footpaths Baseline information on routes. (Ref. 8.15)	Baseline information on long- distance recreational routes.
Sustrans	National Cycle Route (Ref. 8.16)	Geographic Information System (GIS) dataset covering promoted cycle routes.
Lincolnshire County Council	Public Rights of Way (PRoW) (Ref. 8.17)	GIS dataset of public rights of way providing baseline information on the distribution of local routes.
Landscape East	East of England Landscape Character Typology 2010 (Ref. 8.18)	Regional landscape characteristics of Landscape Character Type Profiles covering the East of England and associated mapping.
East Midlands Landscape Partnership	East Midlands Region Landscape Character Assessment 2010 (Ref. 8.19)	Regional landscape characteristics of Landscape Character Type Profiles covering

Organisation	Data source	Data provided
		counties in the East of England, including Peak District National Park and Lincolnshire Wolds National Landscape.
East Lindsey District Council	Landscape Character Assessment 2009 (Ref. 8.20)	Local landscape characteristics of LCAs for East Lindsey District Council.
South East Lincolnshire Joint Strategic Planning Committee	Landscape Character Assessment of Boston Borough 2009 (Ref. 8.21)	Local landscape characteristics of LCAs for Boston Borough Council.
South East Lincolnshire Joint Strategic Planning Committee	Strategic Landscape Capacity Study for South Holland District Council 2003 (Ref. 8.22)	Local landscape characteristics of LCAs for South Holland District Council.
King's Lynn & West Norfolk Borough Council	Landscape Character Assessment 2007(Ref.8.23)	Local landscape characteristics of LCAs for King's Lynn & West Norfolk Borough Council.
Fenland District Council	Fenland Local Plan 2021-2040: Draft Local Plan Consultation 2022 (Ref. 8.24)	Local landscape characteristics of LCAs for Fenland District Council.
Lincolnshire County Council	The Historic Landscape Character Zones 2011 (Ref. 8.25)	Historic Character Zones of Lincolnshire and key historic landscape characteristics.
Lincolnshire County Council	The Historic Character of Lincolnshire Report 2011 (Ref. 8.26)	Report on historic landscape character areas, including designations and geological information.
Lincolnshire Wolds Countryside Service	AONB Management Plan 2018-23 (Ref. 8.27)	Characteristics and special qualities of LCAs for Lincolnshire Wolds. National Landscape
Natural England	National Character Area Profile 42 Lincolnshire Coast and Marshes (Ref. 8.28)	National Character Area is defined and recognised by characteristics
Natural England	National Character Area Profile 43 Lincolnshire Wolds (Ref. 8.29)	National Character Area is defined and recognised by characteristics
Natural England	National Character Area Profile 44 Central Lincolnshire Vale (Ref. 8.30)	National Character Area is defined and recognised by characteristics

Organisation	Data source	Data provided
Natural England	National Character Area Profile 46 The Fens (Ref. 8.31)	National Character Area is defined and recognised by characteristics
Department for Environment. Food & Rural Affairs (DEFRA)	MAGIC Map	Landscape Designations and Classifications
Google Ltd	Google Earth	Topography, Visual Receptors and General Landscape Analysis

# **Survey Work**

- 8.4.11 Site survey continues to be an important part of the assessment process, in respect of informing and refining the spatial scope of the study area, in helping to verify and further inform baseline landscape character and visual data collected via different data sources, and in the detailed assessment of effects on visual amenity.
- 8.4.12 Site surveys, undertaken since site-based appraisals to help inform the route optioneering process (and documented within the CPRSS Corridor and Preliminary Routeing and Siting Study, Ref.8.32), have been undertaken on the following dates and for the purposes described:
  - March 2024: to appraise the landscape context and potentially significantly
    affected visual receptors in the Walpole area, in relation to the indicative zone for
    converter stations and indicative Walpole B substation. The site visit was made in
    collaboration with project architects involved in the design progression of the
    converter stations.
  - June 2024: to help inform baseline landscape characterisation.
  - September 2024: for the purpose of visual baseline and the identification of suitable representative viewpoints for inclusion within the PEIR and in subsequent consultation.

#### 8.5 Overall Baseline

#### **Current Landscape Character Baseline**

- 8.5.1 A landscape's character is formed from a myriad of factors, from the natural and cultural/social factors such as landform, hydrology, land cover and settlement patterns through to more intangible elements such as cultural associations and perceptual factors like memories or a sense of place. Temporal factors or features that may have changed over time, such as geology, archaeology, and land ownership are also considered.
- 8.5.2 The indicative zone for underground cable assets passes through multiple NCAs, though most of the draft Order Limits falls within either the Lincolnshire Coast & Marshes (NCA 42) (Ref 8.28) to the north, or The Fens (NCA 46) (Ref 8.31) to the south (see Volume 3, Part 1, Figure 1-2: the Projects draft Order Limits and Volume 3, Part 2, Figure 8-1: National Landscape Character Areas and Lincolnshire Wolds National Landscape).

- 8.5.3 The northern extents of the study area encompass the coastal plains of the Lincolnshire coast and transitions inland traversing across both the open landscape of the Outmarsh and the softly undulating Middle Marsh with large swathes of arable land and a complex series of waterways that drain back towards the sea.
- 8.5.4 Further to the south, draft Order Limits cross into the wetland landscape of the fens and continue to run mostly perpendicularly to the East Coast. These fenlands are united by the low-lying, level terrain, much of which sits below sea level. Long-term man-made influences resulted in transformation of natural marshes into arable landscapes with many drainage ditches, dykes, and rivers that drain towards The Wash estuary.
- 8.5.5 The baseline character here focuses mainly on the characteristics and features found within the study area. Below, a brief summary of landscape character has been presented. More detailed baseline information, with references to published Landscape Character Assessments, has been presented in Volume 2, Part 2, Appendix 2.8.B: Landscape Character Baseline and Assessment.

#### **Natural**

#### Landform

- 8.5.6 The landform and topography throughout the draft Order Limits is predominantly flat and low-lying. At the northern reaches of the Landfall, the land is typically coastal marshes fractured by sand dunes, whereas inland of the coast and southwards across the draft Order Limits the landform gradually rises, giving way to undulating marshland. Whilst mostly beyond the draft Order Limits, the southern edge of the Lincolnshire Wolds National Landscape lies adjacent to the draft Order Limits, with the exception of a small area of Lincolnshire Wolds National Landscape around Gunby Hall Registered Park and Garden, encroached by the draft Order Limits. The landscape exhibits a transitory shift from the flat, open form of the surrounding lowlands to the ridges, valleys and scarps of the Lincolnshire Wolds National Landscape.
- 8.5.7 Most of the draft Order Limits falls within fenlands, a large-scale, low-lying, flat and open landscape. A large portion of the draft Order Limits is located within the settled, drained fens and marshland landscape.

#### Landscape Pattern

- 8.5.8 Away from the coast, the middle marsh landscape comprises a softly undulating arable landscape with a greater number of woodlands and hedgerows than other areas. The landscape is frequently punctuated by ditches and dykes, which often act as field enclosure boundaries.
- 8.5.9 Elsewhere, the fenland landscape is defined by a grid pattern of drains transitioning from a geometric pattern found towards the coast to a more organic pattern inland. Throughout the fenlands, scattered settlements and towns are situated on elevated peninsulas that overlook the surrounding farmlands, connected by ancient, raised roadways.

#### Hydrology

- 8.5.10 The nature of the landscape within draft Order Limits is almost universally agricultural, however, the low-lying nature, elevations and proximity to the coast mean that the lands are liable to flooding which has led to both the northern marshland and southern fenlands man-made transformation, hosting a complex system of streams, rivers, drainage ditches and canalised waterways to direct water back towards the coast.
- 8.5.11 Across the northern marshlands, a series of smaller natural and man-made rivers, drains and ditches provide drainage towards the sea. There are several embanked rivers, such as the Great Eau, within the area, and chalk streams, either fed by the nearby Chalk Wolds, or formed on the underlying chalk bedrock. These are key features of the area and are noted for their unique biodiversity.
- 8.5.12 The fenlands, much of which are below sea level, rely on pumped drainage and sluices, and the four major artificially canalised rivers of the Witham, Welland, Nene and Great Ouse, bounded by high banks to protect the lower adjacent fields, drain into the Wash estuary to the east.

# Geology

- 8.5.13 The northern regions of the study area are typically underlain by Cretaceous chalk, predominantly overlain by glacial till, though pockets of glacial sands, silts, clays, and gravels are present. Small areas of peat and river alluviums exist within river valleys.
- 8.5.14 At the northern end, where the draft Order Limits extend to east coast, dunes are formed from windblown sands and marine and estuary deposits. At the coast, fluvial and marine deposits form salt marsh, mud flats, and sand flats.
- 8.5.15 Within the inland, mid and southern regions of the draft Order Limits, marshlands, and fenlands are underlain primarily by Jurassic clay and overlain by drift, creek, and tidal deposits, which provide the rich, fertile soils used for intensive farming throughout the area. At the southeastern extent of the draft Order Limits, towards Kings Lynn, the superficial geology is similar, though the underlying geology is predominantly mudstone as opposed to clays.
- 8.5.16 Outside of the draft Order Limits, the coastal saltmarshes and mud flats are like those found in the north, whilst the Lincolnshire Wolds National Landscape consist of a glacial and periglacial geology with a chalk upper crust.

#### Flora & Fauna

- 8.5.17 Within the study area, arable and market crops are prevalent, though seasonal variation provides some diversity of vegetation. Many of the fields are bounded by ditches that form part of the drainage networks for the marshlands or fenlands, and these channels are typically lined with reeds and rushes. Although ditches bound most fields, there is also a significant portion of native species in enclosure hedgerows and mature remnant hedgerows throughout, particularly in the settled fens to the south.
- 8.5.18 Tree cover is generally scarce across the draft Order Limits, whilst solitary mature field trees are present in places. Most of the existing tree cover is provided by Beech clumps, mixed species shelterbelts or small patches of ancient and semi-ancient woodland. Where the route corridor is closer to the Lincolnshire Wolds National Landscape, there is a general increase in the density of woodland and tree cover, with the intensity increasing outside the draft Order Limits around the base of the

- Lincolnshire Wolds National Landscape, whilst at the southern extents, near the settlement of Wisbech there is a notable presence of orchards.
- 8.5.19 The coastal regions, such as those at the northern extents of the draft Order Limits and outside of the study area around The Wash, are home to conservation areas and provide biodiversity interest both in relation to vegetation, birds, wading birds and other animals.

#### **Cultural/Social Land Use**

- 8.5.20 The draft Order Limits predominantly traverses agricultural land, dominated by arable land use, with large swathes of the landscape used for crop farming. Pastoral land is found throughout the study area, although it is more frequently located closer to small, nucleated settlements or on land where access to farm machinery is more limited.
- 8.5.21 The area of draft Order Limits mostly avoids settlements. However, the fringes of some of the larger built-up areas, such as Mablethorpe, Boston and Wisbech, do fall within the corridor's wider buffer area. There are also a handful of smaller settlements within the draft Order Limits, the densest being Sibsey, Sutterton, and Holbeach.
- 8.5.22 Outside of the draft Order Limits, the land remains largely arable farmland, with areas of more articulated fenland towards the coast. Where not reclaimed or drained, these are more commonly used for pasture or left to form natural habitats.

#### Settlement

- 8.5.23 Settlement throughout the study area is generally sparse and is dominated by a typically dispersed pattern of villages, hamlets, and isolated farms. In some places, linear settlement patterns are present, such as around the base of the Lincolnshire Wolds National Landscape in the north, and along key roadways within the settled fenlands to the south.
- 8.5.24 Overall, built form across the landscape remains limited. Whilst there are several larger towns or settlements, they fall outside of the draft Order Limits. Within the draft Order Limits, smaller towns such as Sutterton or Sibsey, and villages and hamlets such as Fleet Hargate, Frithville and Brothertoft predominate.
- 8.5.25 Coastal regions typically comprise clusters of settlement, particularly holiday resorts such as Mablethorpe (outside draft Order Limits). The larger inland towns and villages inland, such as Boston or Holbeach, are typically set on higher ground than the surrounding fields and lowlands.

#### Time Depth

- 8.5.26 Time depth recognises natural and man-made changes that influence the current landscape and how it is perceived. The study area is located partially within four of Lincolnshire's Historic LCAs: The Grazing Marshes, The Lincolnshire Wolds, The Fens and The Wash.
- 8.5.27 The most significant changes to the landscape have resulted from two main drivers, both of which continue to influence the landscapes today. One of them was a desire to reclaim the marshes for agricultural use combined with a struggle to achieve it and desire to control floods. Except for the Lincolnshire Wolds, the areas have all been heavily influenced by drainage, although the process, age, and legacy varied.

- 8.5.28 Further inland, the land was first drained by the Romans, but full stable drainage wasn't achieved until the 18th/19th century through methods such as pumping stations, canalised rivers, networks of drains and dykes, evidence of which are present in the landscape today. Within the Wash, drainage was achieved through gradual accretion, defence, and enclosure, resulting in sea banks that remain visible. The area has been dry land since the end of the Roman period.
- 8.5.29 There is evidence that from the Iron Age onwards, salterns and their associated by-products of sand and silt affected the makeup of the landscape, evidenced by the spoil mounds visible in the outmarsh landscape.
- 8.5.30 Following the draining works, agricultural use expanded with many of the historic boundaries removed to create larger, more expansive fields that allow modern mechanical and intensive farming techniques. This correlates with the shift from pastoral farming when the landscape was more liable to floods or seasonal changes and grazing was more practicable, to post drainage, where the fertile soils could be exploited for productive arable crop farming.
- 8.5.31 The Lincolnshire Wolds were mostly in arable use originally. However, later, pastoral farming increased in importance primarily for the supply of wool, as evidenced by enclosures near historic settlements. After the Second World War, there was a shift back to arable farming, resulting in the removal of historic boundaries to accommodate modern farming practices.
- 8.5.32 Outside of these two primary drivers, there are other historic elements and features that demonstrate the evolution of these landscapes, notably the drove roads from the Lincolnshire Wolds to the surrounding lowlands. The pillboxes found across the Wash are remnants of the Second World War.

#### Cultural Associations

- 8.5.33 The study area predominantly encompasses the Lincolnshire fens and marshes, it also skirts the southwestern extents of the Lincolnshire Wolds National Landscape and terminates at the Lincolnshire coast. These areas have been, and continue to be, a source of cultural inspiration with their natural beauty, distinctive features, and defining characteristics found in notable pieces of art and literature.
- 8.5.34 Panoramic views, scenic qualities and isolated structures, features synonymous with these areas, inspired many artists such as Peter De Wint and John Piper. The landscapes have also been the inspiration for literary works such as those of Sir John Betjeman and Alfred Lord Tennyson.
- 8.5.35 The Tennyson family has strong ties to the Lincolnshire Wolds, with the poet laureate having spent many of his formative years in the area, whilst the famed explorer Captain John Smith, a prominent figure in the story of Pocahontas, is from the Lincolnshire Coast and Marshes area.

#### **Perceptual & Aesthetic**

#### **Views**

8.5.36 At the northern extents of the study area around Anderby Creek, the coastal regions of the North Sea provide panoramic, unbroken views out across the sea. The views inland, whilst still wide, are more broken and fractured due to the presence of tidal defences and sand dunes.

- 8.5.37 Moving further inland, to the south, where the route corridor follows around the Wash Estuary, the fenlands and marshes typically feature large-scale, open, panoramic vistas, with vast views over fields and farmlands, particularly from the elevated roadways and settlements found throughout area. Occasionally, these views are foreshortened by the presence of shelterbelts, clumps of trees or urban fringe clutter, whilst landmarks such as church spires or towers can often provide focal points or identify the presence of nearby settlements.
- 8.5.38 Outside the draft Order Limits the elevated landscape of the Lincolnshire Wolds National Landscape acts as both a key feature for those within the route corridor looking outwards, as well as a prominent location where views extend towards the coastline.

# Tranquillity

- 8.5.39 The rural nature of the fenland landscape is characterised by typically wide and open views, general remoteness, lack of major roads, and absence of large urban build-up, which results in an overall sense of remoteness and tranquillity throughout the area.
- 8.5.40 Across the study area there are areas where the tranquillity is locally disturbed, particularly around the busier 'A' roads such as the A17 and A47, where faster moving, and higher volumes of traffic can affect the tranquillity. The tranquillity reduces within mid marsh landscape set in the middle between Lincolnshire Wolds National Landscape and east coast and increases further to the west within the Lincolnshire Wolds National Landscape.
- 8.5.41 This sense of tranquillity is locally higher in some areas where prominent features or key characteristics enhance the sense of wilderness or isolation, such as at the northern extents of the draft Order Limits which terminates at the North Sea coast.

#### **Published Landscape Character Assessments**

8.5.42 Landscape character is a composite of physical, cultural, perceptual and aesthetic elements. Landform, hydrology, vegetation, land cover, land use pattern, cultural and historic features and associations combine to create a common 'sense of place' and identity which can be used to categorise the landscape into definable types and areas. Published landscape character assessments provide baseline information that is used to guide landscape change. Below, a reference has been made to published Landscape Character Assessments at National, Regional and District scale alongside HLC.

#### **National Landscape Character**

8.5.43 At the national scale, Natural England mapped and designated NCA in 2013-15 (Ref 8.14) based on recognised and identifiable characteristics. The NCAs that the draft Order Limits passes through are shown in Volume 3, Part 2, Figure 8-1: National Landscape Character Areas and Lincolnshire Wolds National Landscape. Further detail is provided in Volume 2, Part 2, Appendix 2.8.B: Landscape Character Baseline and Assessment.

#### **Regional Landscape Character**

8.5.44 At the regional scale, East Midlands Landscape Partnership published the East Midlands Region Landscape Character Assessment in 2010 (Ref 8.20), and Landscape East published the East of England Landscape Character Typology in

2010 (Ref 8.18). These define LCTs and LCAs, which provide landscape characterisation at a regional level. The LCTs and LCAs that the fall within the area the draft Order Limits passes through are shown in Volume 3, Part 2, Figure 8-1: National Landscape Character Areas and Lincolnshire Wolds National Landscape. Further detail is provided in Volume 2, Part 2, Appendix 2.8.B: Landscape Character Baseline and Assessment.

# **District Landscape Character**

- 8.5.45 At the district scale, the study area traverses through several District and Borough Councils:
  - East Lindsey District Council
  - Boston Borough Council
  - South Holland District Council
  - King's Lynn and West Norfolk Borough Council
  - Fenland District Council
- 8.5.46 These councils have produced various studies and assessments that provide landscape characterisation at a district level and have been used as a basis for the preliminary landscape character assessment. Volume 3, Part 2, Figure 8-1: National Landscape Character Areas and Lincolnshire Wolds National Landscape shows the LCAs and LCTs that the draft Order Limits traverses. Further detail is provided in Volume 2, Part 2, Appendix 2.8.B: Landscape Character Baseline and Assessment Landscape Character of Lincolnshire Wolds National Landscape
- 8.5.47 The Lincolnshire Wolds AONB Management Plan (Ref 8.28) defines four local LCAs. However, only two LCAs listed below fall within the study area of the English Onshore Scheme as listed below:
  - The Ridges and Valleys of the South-West LCA; and
  - The South-Eastern Claylands LCA.
- 8.5.48 However, as only the Ridges and Valleys of the South West LCA would be affected directly, the effects on The South-Eastern Claylands LCA have been scoped out from the assessment., as any perceived change would be indirect and short-term in nature and of a scale that would not affect the LCAs inherent qualities.

#### **Historic Landscape Character**

- 8.5.49 The historical landscape character context of the study area is mostly captured by The Historic Character of The County of Lincolnshire report (Ref 8.27) carried out by Lincolnshire County Council in 2011. The report defines Regional Character Areas and further identifies Historic Landscape Character Zones. Further detail is provided in Volume 2, Part 2, Appendix 2.8.B: Landscape Character Baseline and Assessment.
- 8.5.50 The study area includes various designated assets, including Listed Buildings across the rural extents of the landscape and the more settled areas. There are also significant non-designated assets demonstrating human activity from early prehistoric times through modern times.

8.5.51 Whilst the landscape is predominantly used for arable farming today, this is due to the significant human influence that transformed the former marshland landscape into arable fields through extensive drainage works, transforming the natural landscape into geometric fields.

# **Landscape Designations**

- 8.5.52 The draft Order Limits traverses the Ridges and Valleys LCA within the Lincolnshire Wolds National Landscape, as well as other areas with integral connections to the Lincolnshire Wolds. **Section 8.10** considers the Lincolnshire Wolds National Landscape special qualities that contribute to the 'natural beauty' and 'sense of place' of the landscape and how the English Onshore Scheme may affect these special qualities or impact the delivery of the National Landscape's statutory purpose.
- 8.5.53 **Table 8-7** below details key special qualities of the Lincolnshire Wolds National Landscape, which are detailed within the Lincolnshire Wolds AONB Management Plan 2018-2023 (Ref 8.28).

**Table 8-7 - Special Qualities of Lincolnshire Wolds National Landscape** 

Special Quality	Key features, including quality and extent	
Landscape Character	Scenic beauty & rural charm: Undulating landscape with strong cohesive identity throughout and agriculture as a core underlying feature.	
	<b>Expansive, sweeping views:</b> Panoramic, dramatic vistas from peaks and elevated plateaus looking out across the surrounding landscapes.	
	Peace & tranquillity: General sense of remoteness and rural isolation away from main roads enhanced by raised plateaus and secluded valleys.	
	<b>Farmed land:</b> Rectilinear fields of agricultural cultivation cover most of the area with additional areas of permanent grassland.	
Earth Heritage	<b>Chalk upland plateau &amp; valley landscape:</b> Key geological character formed by a chalk capping underlain by a series of clay, sandstones, and ironstones, that have been established by at least two cycles of glaciation.	
	Glacial/periglacial features: Remains of glacial and periglacial geological features, particularly outside of the Northwest Scarp LCA. Including remnant lakes and spillways.	
	<b>Geological qualities:</b> Evidence of pits throughout the National Landscape, typically either overgrown or infilled, that demonstrate geological qualities of the area.	
Biodiversity	Calcareous, meadow, pasture & wet grasslands: Roughly 13% of the National Landscape consists of calcareous meadow, pasture and wet grassland including over 55 sites with primary grassland chosen as Local Wildlife Sites, as well as 10 SSSI across the area.	
	<b>Beech clumps:</b> Clumps of Beech scattered throughout the landscape, with most copses located in the Chalk Wolds LCA.	

Special Quality	Key features, including quality and extent
	<b>Woodlands:</b> Range of mixed woodlands, largely 18th or 19th century plantings, mainly broadleaved, covering 4.4% of the area
	<b>Ancient Woodlands:</b> Patches of ancient woodland, but highly visible, including several SSSI, totalling roughly 600 ha, predominantly consisting of oak and ash.
	River, streams, and ponds: Complex network of waterways including 9 principal river systems, spring line sources, and streams. Hedgerows: Predominantly enclosure hedgerows bounding agricultural fields, though small patches of species rich pre-enclosure hedgerows remain in places.
	<b>Roadside verges and green lanes:</b> Broad verges alongside some ancient, drover's and salter's roads provide valuable flower rich habitats and notably 17 roadside nature reserves (RNR) within the area.
Archaeology	<b>Ancient route-ways:</b> Roman roads, salter routes, and drover routes are key features throughout the whole of the National Landscape with many acting as byways within the area.
	<b>Scheduled monuments:</b> Archaeologically rich area with around 100 Scheduled Monuments within the National Landscape.
	<b>Burial mounds &amp; monuments:</b> Abundance of barrow sites can be seen on the chalk tops and connecting routes, along with 13 Anglo-Saxon cemeteries scattered throughout the landscape.
	Deserted medieval villages & shrunken medieval villages: High volume of deserted or shrunken medieval villages located on plateaus and around spring lines across the majority of the National Landscape, excluding the Southeastern Claylands LCA.
	<b>Roman villas and settlements:</b> Some presence of Roman villas and settlements across the National Landscape, with higher concentration of features within the Chalk Wolds LCA.
Cultural Associations	<b>Literary/artistic:</b> Cultural associations recognised in poetry, art and writing, influencing also local vernacular dialect.

## **Special Quality Key features, including quality and extent** Village character, including churches: The National Landscape has Historic Landscapes & a significant number (72) of villages with distinctive churches and a Buildings smaller number (16) of villages without a church with many houses constructed of brick and pantile. Conservation areas: Throughout the area there are 343 listed buildings, and heritage features of grade I, II & III, as well as several Conservation Areas. **Traditional farm buildings:** Large number of traditional agricultural buildings, particularly planned Victorian farmsteads, with the majority located within the Chalk Wolds LCA and Southwestern Ridges and Vallevs LCA. Industrial heritage, airfields, railways and mine workings: Pockets of industrial and military heritage across the whole of the National Landscape, including 9 historic military sites, former airfields and old railway lines. **Moated sites:** There are several moated sites, primarily located within the Southwestern ridges and valleys LCA. Watermill & Windmills: Records of locations across the area with remains of structures in about a dozen places. **Dry stone walls:** Drystone walls are characteristic for the Northwest Scarp LCA.

8.5.54 Although 'natural beauty' is not defined within the Lincolnshire Wolds AONB Management Plan 2018-2023 (2018) (Ref 8.28), the reference has been made to the definition published by the Countryside Agency (2001) (Ref 8.33) (at present Natural England): "Natural beauty' is not just the visual element of the landscape, but includes landform and geology, plants and animals, landscape features and the rich history of human settlement over the centuries", encompassing qualities extending beyond the 'scenic beauty'.

## **Relevant Designations**

- 8.5.55 In addition to the above, the study area also contains the following heritage and ecological designations:
  - · Listed Building;
  - Ancient Woodland;
  - Countryside and Rights of Way (CRoW) Act Access Land;
  - Special Protection Area (SPA);
  - Sites of Special Scientific Interest (SSSI);
  - Scheduled Monuments;
  - Local Nature Reserves (LNR);
  - National Nature Reserves (NNR);
  - Registered Common Land;

- Ramsar Site; and
- Special Areas of Conservation (SAC).
- 8.5.56 The impacts and effects on these designations will not be assessed within the LVIA as they are to be considered in other aspect specific chapters; however, they will inform the judgement of landscape value and contribute to designations of present-day landscape character and visual amenity. Their location is shown in Figures (Volume 3, Part 2, Figure 8-2: Local Landscape Character Areas). Additionally, CRoW Act Access Land and Registered Common Land are important recreational resources and as such views from these areas will be considered as part of the visual assessment within the LVIA.

#### **Visual Baseline**

#### Overview

- 8.5.57 Visual effects result from changes in the composition and character of views available in the areas affected by the Projects, considering the response of the individuals who experience these effects. Visual receptors include those groups or individuals who may be living or working in the area, enjoying recreational activities, or simply passing through the landscape.
- 8.5.58 The visual baseline is sub-divided and described on a section-by-section basis (described as Landscape Sections) across the full extent of the Projects (based broadly on the section lengths previously adopted for the Scoping Report). These are intended as an aid for the location and description of the visual receptors to be assessed and are not intended as absolute boundaries, or representative of administrative boundaries.
- 8.5.59 The following narrative provides an overview of visual baseline characteristics, describing the key visual characteristics of the landscape through which the Projects are proposed to be sited, from north to south. Additional, specific detail of visual baseline is included via the context descriptions for each of the representative viewpoints (included within Volume 3, Part 2, Figure 8-3: Representative Viewpoint Locations and) and for the visual receptor groups identified as likely to be subject to potential significant effects (included within Volume 2, Part 2, Appendix 2.8.C: Preliminary Visual Baseline and Assessment)
- 8.5.60 The northernmost extents of the Projects (Landscape Section 1 Anderby Creek Landfall Thurlby) are characterised by a broad coastal margin of open beach, bounded by raised dunes which afford far reaching views inland and across coastal farmlands towards the far distant skyline of the Lincolnshire Wolds. This remote coastal landscape north of Skegness is a popular visitor destination, with recreational facilities including caravan / holiday parks centred at Anderby Creek and Anderby, and with connecting footpaths linking the inland villages and the coast. Visitor parking facilities punctuate the coastal margin, which forms a part of the King Charles III England Coast Path, a long-distance National Trail connecting the entire coastline of England.
- 8.5.61 Extending between the landfall setting at Anderby Creek and the Lincolnshire Wolds to the west (Landscape Section 1 Anderby Creek Landfall Thurlby and Landscape Section 2 Thurlby Welton le Marsh) is an extensive fenland landscape of consistent visual traits. It is flat and open, characterised by intensive and predominantly arable agricultural land that is defined by a mosaic of large scale, open

field pattern and with limited intervening vegetation. Settlement pattern is consistently one of dispersed, nucleated villages and scattered rural properties, connected by a network of rural lanes. Mature vegetation cover is commonly associated with the village settings and their connecting roads, with often far-reaching intervening views interrupted only by the visual amalgamation of vegetation over distance, creating a consistent middle to far distant horizon of vegetation. The landscape has a pronounced sense of scale due to its openness. Any features which break the skyline become a visual reference, giving a measure of distance and landmark in an otherwise largely homogenous landscape setting.

- 8.5.62 To the west (Landscape Section 2 Thurlby Welton le Marsh and Landscape Section 3 Welton le Marsh Little Steeping), the Lincolnshire Wolds (National Landscape) appears in distinct and noticeable contrast to the fenland surroundings. The low, rising hills at the southernmost limit of the Lincolnshire Wolds near Gunby define an immediate transition of character, forming a raised and well wooded skyline to the west of Welton le Marsh. Woodland plantations are a feature of the landscape between the villages of Welton le Marsh, Orby, Candlesby and Great Steeping which, along with a framework of long-established estate woodlands surrounding Gunby Hall (National Trust), create a stronger sense of overall enclosure across this southern fringe of the Wolds. The special landscape qualities of the Lincolnshire Wolds have a high scenic value, along with the presence of Gunby Hall (National Trust) as a visitor destination and an established local network of PRoW connecting the Hall with surrounding villages and parkland.
- 8.5.63 The fenland landscape extends south and west of the Lincolnshire Wolds, broadly between Great Steeping and Sibsey towards Boston (Landscape Section 4 Little Steeping Sibsey Northlands). The area is more sparsely populated with consequently a more pronounced sense of it being an intensively managed agricultural landscape. The field pattern becomes larger and more consistently rectilinear south of the Steeping River, defined by a similarly grid-like network of open drainage ditches and straight interconnecting roads. There is a progressive and overriding sense of openness and scale, although with a somewhat limited sense of local place due to the infrequency of neighbouring villages and the dispersed pattern of settlement, often with a lack of visual reference in terms of either settlement or landmark. There are few public footpaths crossing the area, limited mainly to connecting PRoW between Sibsey, Northlands and Stickney.
- 8.5.64 The western hinterland of Boston (Landscape Section 5 Sibsey Northlands Hubbert's Bridge and Landscape Section 6 Hubbert's Bridge Moulton Sea's End) forms a continuation of this open and intensively agricultural fenland landscape, where the very large rectilinear field pattern and infrequent boundary vegetation continues to allow for wide and far-reaching views, interrupted or fragmented by linear belts of vegetation most associated with residential settlement along road networks or around isolated farmsteads. Dispersed hamlets are connected by a network of local lanes, linking to major roads that converge across the landscape towards Boston. The Poacher Line (also known as the Grantham-Skegness line) is a railway that runs for 55 miles, connecting Grantham with Skegness and intervening locations and crossing the landscape west of, and towards Boston. The residential fringes of the town are evident although not prominent, with distant village church spires and the characteristic tower of St Boltoph's Church providing visual references on the surrounding skyline.
- 8.5.65 Large drainage cuts and waterways, some of which are navigable or seasonably navigable, are a recurrent feature of the landscape surrounding Boston, these also

converge towards the town. They include the River Witham (operated by the Canal and River Trust), Black Sluice Navigation (South Forty Foot Drain) and the Witham Navigable Drains, with connecting lock accesses at Cowbridge and to the River Witham at Anton Gowt. These larger waterbodies tend to be well flanked by vegetation and form a well-connected network of footpaths connecting into Boston.

- 8.5.66 The fenland agricultural landscape continues south of Boston, encompassing the marsh areas surrounding the River Welland between the larger settlements of Kirton, Sutterton and Holbeach (Landscape Section 6 Hubbert's Bridge Moulton Sea's End and Landscape Section 7 Moulton Sea's End Foul Anchor). To the north of the River Welland, the field pattern remains of a large scale, although less rectilinear in form and with a network of smaller drainage courses. Belts of woodland tend to punctuate views across the landscape, and overhead power lines form distant skyline features to the east and west. The footpath network is infrequent throughout the area but includes two long distance routes, the Cross Britain Way at Sutterton and the Macmillan Way, a long-distance footpath connecting Boston with Abbotsbury along the River Welland, along with the long distance cycle route NCN 1. The river is navigable and the settlements of Fosdyke and Fosdyke Bridge, situated on the major A17 road corridor, form a prominent location for road users at the point of the river crossing, where mooring facilities and boat activity are evident.
- 8.5.67 The extensive marsh areas south of the river continue as large scale intensive agricultural land, with very large field sizes and little intervening vegetation. Overhead power lines form skyline features to the east and west, these being visible across wide and unrestricted fields of view. Interconnected village settings become more evident towards and around Holbeach, including Moulton Sea's End, Holbeach Clough and Fleet Hargate, with definition provided by their associated vegetation cover and landmark buildings visible on the skyline. The footpath network is limited but interconnects the villages primarily along the lines of drains and watercourses.
- 8.5.68 Between Tydd St Mary and Foul Anchor, and towards the River Nene and Walpole (Landscape Section 7 Moulton Sea's End Foul Anchor and Landscape Section 8 Foul Anchor Walpole), the fenland agricultural landscape broadly associated with The Wash remains open and far reaching in terms of views. The linear channel of the River Nene forms a stark intervention across the landscape, flanked by raised levees. It is crossed by several overhead power lines, all converging towards the existing Walpole A Substation on the eastern side of the river and on the fringes of Walpole St Peter. There is a visible predominance of energy related infrastructure locally across the landscape, extending from the Grange Windfarm north of Foul Anchor, Sutton Bridge Power Station, the existing National Grid Walpole A Substation and its connecting overhead power lines, which in combination create a skyline heavily influenced by infrastructure in most directions.
- 8.5.69 Within this context, several interconnected villages are situated between the River Nene and the A47 road corridor, including Walpole St Peter, West Walton, Walton Highway, Ingleborough and Walpole Highway, along with linked or isolated residential properties and farmsteads along rural lanes. Vegetation cover is sparse, limited to isolated belts of planting, that of established residential areas and where orchard shelterbelts form a local feature of the landscape across the northern fringe of Walton Highway and West Walton.
- 8.5.70 A well-established network of signed footpaths (The Jubilee Way) interconnects with the villages. The towers of St Mary's Church (West Walton), St Peter's Church

(Walpole St. Peter) and Ingleborough Mill (Ingleborough) are visible local landmarks, often visually interconnected.

#### Visual Receptors

8.5.71 The following provides a broad summary of the visual receptors within the study area extents and with the likelihood for potential significant effects, for each of the Landscape Section lengths:

# Landscape Section 1: Anderby Creek Landfall - Thurlby

- 8.5.72 Communities and residential receptors within the settlements and surroundings of Anderby Creek, Anderby, Huttoft, Thurlby and Mumby.
- 8.5.73 Residents of isolated properties located along Sea Lane, Roman Bank and Sea Road between Anderby Creek and Anderby.
- 8.5.74 Recreational receptors including:
  - Users of Huttoft Beach, Anderby Creek Beach and Moggs Eye Beach;
  - Users of the King Charles III England Coastal Path;
  - Users of PRoW interconnecting with Huttoft, Anderby and Mumby, and routeing east towards the coast; and
  - Recreational users of caravan parks / holiday homes between Huttoft, Anderby and Anderby Creek, and at Thurlby.
- 8.5.75 Road users of the A52, B1449, Sea Lane, Roman Bank, Sea Road and minor roads.

#### Landscape Section 2: Thurlby - Welton le Marsh

- 8.5.76 Communities and residential receptors within the settlements and surroundings of Cumberworth, Farlesthorpe, Bonthorpe, Willoughby, Sloothby and Welton le Marsh.
- 8.5.77 Scattered residential receptors along Mill Lane (between Willoughby and Sloothby).
- 8.5.78 Recreational receptors including:
  - Users of PRoW interconnecting between the above listed settlements; and
  - Users of recreational facilities at camp sites/caravan parks located at Mumby, Cumberworth
- 8.5.79 Road users of the A52, B1196, B1449 and minor roads.

## Landscape Section 3: Welton le Marsh - Little Steeping

- 8.5.80 Communities and residential receptors within the settlements and surroundings of Welton le Marsh, Orby, Candlesby, Gunby, Great Steeping, Firsby, Bratoft and Little Steeping
- 8.5.81 Recreational receptors including:
  - Users of PRoW connecting Candlesby, Gunsby, Welton le Marsh and Orby, and within the Lincolnshire Wolds;
  - Visitors to Gunby Estate Hall and Gardens; and

- Users of recreational facilities, including Kelsey Wood Country Park, The Gunby Lake Holiday Park.
- 8.5.82 Travellers using the Poacher Railway Line (Grantham Skegness) through Firsby.
- 8.5.83 Road users of the A1028, A16, A158 (north and west of Gunby Estate Hall and Gardens), B1196 Station Road, B1195 and minor roads.

#### Landscape Section 4: Little Steeping - Sibsey Northlands

- 8.5.84 Communities and residential receptors within the settlements and surroundings of Little Steeping, Midville, Eastville, Sibsey, Sibsey Fen Side and the easternmost residential fringes of Stickney.
- 8.5.85 Isolated residential receptors along Halton Fen, Station Road, Thorpe Bank, Spilsby Road, Bell Water Drain Bank, Hobhole Bank.
- 8.5.86 Recreational receptors including:
  - Users of PRoW near Little Steeping; and
  - Users of caravan parks / holiday parks located at Midville and at Lakeside Holiday Resort, Little Steeping.
- 8.5.87 Travellers using the Poacher Railway Line (Grantham Skegness) between Sibsey and Firsby.
- 8.5.88 Road users of Halton Fen, Station Road, Thorpe Bank, Spilsby Road, Bell Water Drain Bank, Hobhole Bank and connecting minor roads.

#### Landscape Section 5: Sibsey Northlands - Hubbert's Bridge

- 8.5.89 Communities and residential receptors within the settlements and surroundings of Northlands, Sibsey, Frithville, Cowbridge, Frith Bank, Anton's Gowt, Boston West and the westernmost residential fringes of Boston.
- 8.5.90 Scattered residential receptors along Trader Bank, B1184 Hale Lane and B1183 Boston Road.
- 8.5.91 Recreational receptors including:
  - Users of PRoW along the River Witham and Witham Navigable Drains;
  - Users of National Cycle Route 1 alongside the River Witham, northwest of Boston;
  - Users of Boston and Boston West golf clubs; and
  - Navigational users of the River Witham and Witham Navigable Drains
- 8.5.92 Travellers using the Poacher Railway Line (Grantham Skegness) and Hubbert's Bridge Station, between Hubbert's Bridge and Chain Bridge.
- 8.5.93 Road users of the A16, B1183 Boston Road, B1184 Hale Lane, and minor roads

#### Landscape Section 6: Hubbert's Bridge - Moulton Sea's End

8.5.94 Communities and residential receptors within the settlements and surroundings of Hubbert's Bridge, Chain Bridge, Kirton Holme, the westernmost fringes of Wyburton and Kirton, Kirton End, Sutterton, Algakirk, Fosdyke and Fosdyke Bridge.

- 8.5.95 Scattered residential receptors along the B1192 Holmes Lane, Kirton Holme Road and the B1391 Donigton Road towards Kirton End.
- 8.5.96 Scattered residential receptors along Fishmere End Road, the B1397 Boston Road and Red Barn Lane between Kirton and Summerton.
- 8.5.97 Scattered residential receptors along Washdyke Road and Waste Green Lane between Algakirk and Fosdyke Bridge.
- 8.5.98 Recreational receptors including:
  - Users of PRoW which route mostly near rivers and drains west of Kirton End, the Cross Britain Way near Algakirk and Macmillan Way alongside the River Welland at Fosdyke;
  - Users of National Cycle Route 1 which crosses the River Witham at Fosdyke;
  - Users of recreational facilities, including Poplar Farm (west of Kirton End) and Kirton Holme Golf Club; and
  - Navigational users of the River Welland and Black Sluice Navigation (South Forty Foot Drain)
- 8.5.99 Road users of the A16 and A17, A52 Swineshead Road, B1192, B1391 Donington Road, B1397 Boston Road and minor roads.

Landscape Section 7: Moulton Sea's End - Foul Anchor

- 8.5.100 Communities and residential receptors within the settlements and surroundings of Moulton Sea's End, Saracen's Head, Holbeach Clough, Holbeach Bank, Holbeach Hurn, Holbeach, Fleet Hargate, Sutton St James, Tydd St Mary, Tydd Gate, Foul Anchor and Sutton Bridge.
- 8.5.101 Recreational receptors including:
  - Recreational users of ProW at Delph Bank, South Holland Drain and the Nene Way long-distance footpath;
  - Users of National Cycle Route 1, south of Fosdyke Bridge and to the north and east of Holbeach; and
  - Navigational users of the River Nene.
- 8.5.102 Road users of the A17 and A1101, the B1357, B1390, B1165, B1168 and minor roads.

Landscape Section 8: Foul Anchor – Walpole (indicative zone for converter stations and indicative Walpole B Substation)

- 8.5.103 Communities and residential receptors within the settlements and surroundings of Foul Anchor, Four Gates, Tydd St Giles, Newton-in-the-Isle, Walpole Marsh, Walpole Cross Keys, Ingleborough, Walpole St Peter, Walpole St Andrew, West Walton, Walton Highway, Walpole Highway and the northernmost fringe of Wisbech.
- 8.5.104 Recreational users of the Nene Way long distance footpath and PRoWs between West Walton, Ingleborough and Walpole St Peter, including the Jubilee Way.
- 8.5.105 Users of National Cycle Route 1 between West Walton. Walton Highway and towards Walpole Highway;

- 8.5.106 Navigational users of the River Nene.
- 8.5.107 Road users of the A47, A17, A1101, A47, B198 and minor roads.

#### **Future Baseline**

- 8.5.108 Landscape change is an ongoing and inevitable process that will continue across the LVIA study area regardless of whether the English Onshore Scheme proceeds. Change can arise through natural processes (for example, the maturity of woodlands), human activity (for example, through development), or climate change. The paragraphs below summarise the key changes predicted for the near future (up to 30 years), in the context of potential impacts highlighted within the National Character Area Profiles
- 8.5.109 New development, such as residential extension to historic villages, combined with an increase in larger industrial-scale units, mainly related to the agricultural/horticultural industry, introduced often with minimal screening, contributes to erosion of the historic character of some villages within the coastal marshes and fenland. The study area will continue to be under pressure from large-scale industrial-scale units, often introduced with minimal screening. Lincolnshire remains under intense pressure of wind farm development, reducing the sense of remoteness and isolation. In addition, there is a strong pressure from underground cabling for electricity transmission, gas transmission network and overhead power lines combined with increased pressure from medium to large-scale solar farms. The requirements for flood defences and recreational use are frequent in coastal regions.
- 8.5.110 Natural changes in the landscape of the study area relate primarily to changes associated with agricultural farming, the treatment of boundary vegetation, and the increase or decrease of the existing woodland cover. The continuous slow deterioration of land use associated with orchards is expected, combined with the more extensive use of polytunnels and plastic sheeting, altering the local wildness. A slow-paced increase of woodlands and hedgerows within coastal marshes landscape is expected through continued support of Environmental Stewardship Schemes. There is likely to be a continuous loss of wetland pastures, occasionally replaced by wetland woodlands within fenland landscape. The configuration of plant species, particularly hedgerows and trees, is likely to be affected by diseases such as ash die back.
- 8.5.111 Increased storminess, rising sea levels and occasional droughts combine to accelerate soil erosion processes within fens. Rising sea levels create issues for farming in some areas due to more frequent floods, but in others, the warming of the weather means a longer growing season and more intense agriculture.

#### 8.6 Environmental Measures

- As set out in **Volume 1, Part 1, Chapter 5: PEIR Approach and Methodology**, the environmental measures are characterised as design measures or control and management measures. A range of environmental measures would be implemented as part of the English Onshore Scheme and will be secured in the DCO as relevant.
- 8.6.2 **Table 8-8** outlines how these design and control measures will influence the Landscape and Visual assessment. In addition to the measures listed in **Table 8-8**, standard mitigation measures, comprising management activities and techniques, would be implemented during the construction of the Projects to limit effects through

- adherence to good site practices and achieving legal compliance. These are listed in **Volume 2, Part 1, Appendix 1.5.B: Outline CoCP** and are not repeated below.
- 8.6.3 Measures listed in **Table 8-7** have been assigned references, for example, (GG01). These align with the references provided in **Volume 2**, **Part 1**, **Appendix 1.5.B: Outline CoCP** for ease of cross-reference. Any references identified with ID MT (for example, MT01) include measures which may also be listed in other aspects considered as part of this PEIR therefore have been identified as measures which apply to multiple aspects.
- 8.6.4 In addition, design measures identified through the EIA process have been applied to avoid or reduce potential significant effects. Design measures included that a relevant to Landscape and Visuals receptors are included in **Table 8-8** below under Design and Operation and are also included in **Volume 2**, **Part 1**, **Appendix 1.5.A: Outline Register of Design Measures**.

**Table 8-8 - Summary of the Environmental Measures** 

Receptor	Potential changes and effects	Embedded measures	ID reference
Construction			
Landscape character units and visual receptors	Potential loss of trees and hedgerows.	The Contractor would retain vegetation where practicable and in accordance with the Landscape and Ecology Management Plan (LEMP). Where sections of hedgerow would be removed, and are ecologically worth preserving, they would be removed in sections, retaining intact root balls where possible and maintained accordingly to prolong longevity and viability (for example through watering). This will speed up the restoration process.	MT02
		Where vegetation is lost and trees cannot be replaced in situ due to the restrictions associated with land rights required for operational safety, suitable native planting approved by NGET will be used as a replacement, in accordance with the outline vegetation reinstatement plans included within the LEMP. Where possible, replacement tree planting would be undertaken at the closest suitable location to area of loss.	
Landscape character units and visual receptors	Potential loss of trees and hedgerows.	Where the works require the crossing or removal of hedgerows and trees, the gap will be reduced to a width required for safe working.  Where hedge removals are necessary, 'dead hedging' will be used, where practicable, in the interim periods to retain connectivity during construction. Dead hedging can comprise vegetation arisings or artificial provision, such as willow screening panels or Heras fencing covered in camouflage netting.	LV01

Receptor	Potential changes and effects	Embedded measures	ID reference
		Replacement planting using shallow-rooting hedgerow species will be undertaken within the indicative zone for underground cable assets, where easements may preclude the planting of trees or deeper rooted hedgerow species. Elsewhere trees and hedgerow species with more extensive root systems will be reinstated or incorporated.	
Landscape character units and visual receptors	Alteration to the land use, landscape pattern and land cover combined with the introduction of construction machinery and compounds.	An outline Soil Management Plan (SMP) will provide guidelines to mitigate ppotentially significant effects on Agriculture and Soils by ensuring proper soil handling and reinstatement of pre-construction condition. Measures will include but not be limited to the following:  1. details of the soil resources present;  2. Roles and responsibilities (and required competencies and training)	MT14
		how the different topsoil and subsoil will be stripped and stockpiled;	
		4. suitable conditions for when handling soil will be undertaken, for example avoiding handling of waterlogged soil;	
		5. indicative soil storage locations;	
		6. how soil stockpiles will be designed taking into consideration site conditions and the nature/composition of the soil;	
		7. specific measures for managing sensitive soils, such as heavy-textured soils or those supporting valuable habitats;	
		8. suitable protective surfacing (such as Trackway or similar products) where soil stripping can be avoided, and weed suppression encouraged, based on sensitivity of the environment and proposed works;	
		9. approach to reinstating soil that has been compacted; and	

Receptor	Potential changes and effects	Embedded measures	ID reference
		<ul><li>10. details of measures required for and objectives of soil restoration.</li><li>11. requirements for monitoring.</li></ul>	
Landscape character units and visual receptors	Potential loss of trees and hedgerows.	Areas of temporary habitat loss would be reinstated, wherever practicable, following the completion of construction in each area. Wherever possible, reinstatement would be back to the type and condition of habitat affected (unless specified otherwise in landscape plans, as informed by the Biodiversity Net Gain (BNG) assessment (where habitat improvements may be proposed)).	MT08
Landscape character units and visual receptors	Potential loss of trees and hedgerows.	The Contractor would apply the relevant protective principles set out in British Standard (BS) 5837:2012: Trees in relation to design, demolition, and construction, and the UK government 'Standing Advice' for ancient woodland, ancient trees and veteran trees. This would be applied to trees within the Order Limits, which will be preserved through the construction phase, and to trees outside of the Order Limits where such measures do not hinder or prevent the use of the relevant working width for construction. All works to high-grade trees, including trees under Tree Preservation Orders (TPOs) and veteran trees, will be undertaken, or supervised by a suitably qualified arboriculturist. Details of such measures would be included in a method statement and also within the Outline CoCP.	MT03
Landscape character units and visual receptors	Potential non-establishment of environmental measures.	A representative from the relevant planning authority will be present at the final inspection of reinstatement and mitigation planting prior to handover to the landowner, unless agreed otherwise with the relevant planning authority. Where applicable, remedial measures will be agreed between the Applicant and the relevant planning authority during the site visit in accordance with the Development Consent Order.	MT04

Receptor	Potential changes and effects	Embedded measures	ID reference
Landscape character units and visual receptors	Potential non-establishment of environmental measures.	An approach to monitoring will be designed and adhered to, as to be detailed within the LEMP. The results of baseline vegetation surveys and post-construction vegetation (aftercare monitoring) surveys will be provided to the relevant planning authority.	MT05
Visual receptors	Changes to the temporary views during the construction phase.	Temporary and separate placement of topsoil and subsoil will be stored adjacent to the trench. In cases where one of these stockpiles is higher, the additional height will be used on whichever side requires greater screening benefit, where practicable.	LV02
Visual receptors	Construction lighting: Change to the night time views and perceptible light spill and glow.	Construction lighting will be at the lowest levels necessary to provide a safe environment. Lighting will be designed, positioned, and directed to limit light spills and glare.	LV03
Landscape character units and visual receptors	Loss of riparian vegetation.	Riparian vegetation loss will be avoided where possible and limited through construction techniques such as trenchless crossings. Where it will occur, replacement seeding/planting will be undertaken.	LV04
Visual receptors	Short term reduction of recreational opportunities through the temporary closure or diversion of PRoW.	All Public Rights of Way (PRoW) which have the potential to be impacted by the Projects will be identified in an Outline PRoW Management Plan (PRoWMP). The PRoWMP set out the measures required (including any potential temporary closures applied for/detailed in the DCO) to ensure that that PRoW remains safe to use and any that any potential disruption PRoW is minimised. All designated PRoW crossing the working area will be managed in discussion with the relevant local authority, with access only closed for short periods while construction activities occur. Any required temporary diversions or closures of PRoW, footways or carriageways undertaken during construction will be clearly marked at both ends with signage explaining the diversion, the	MT11

Receptor	Potential changes and effects	Embedded measures	ID reference
		duration of the diversion and a contact number for any concerns. The signage will display the temporary diversion routes in place.	
Design and Opera	tion		
Landscape character units and visual receptors		The design of the converter stations, in terms of the building form and the external materials, will be developed alongside consultation and stakeholder feedback. A Design Code for these buildings will be provided with the application for development consent, which will provide guidance regarding the design intent and design principles that will be adopted and embedded into the detailed proposals of this structure.	LV01
		These include:  - Consideration of the siting, orientation and massing of both converter stations in order to reduce impacts upon the	
		wider landscape; - Designing and arranging the built form of the converter stations to be sympathetic to the landscape setting. Buildings clad in appropriate materials and colour tones designed to appear recessive within the landscape and to help integrate the buildings overall; and	
		- To maximise the opportunity for landscape integration, in order that existing landscape features can be retained and enhanced (woodland, hedgerow planting) and additional planting and screening incorporated as appropriate to improve the landscape fit and to reduce visual impact.	
Landscape character units and visual receptors		An outline landscape strategy will be prepared for the converter stations encompassing a collaborative approach to delivering landscape and biodiversity mitigation as well as BNG. It will be developed in recognition of the local landscape policies and landscape character, considering the	LV02

Receptor	Potential changes and effects	Embedded measures	ID reference
	Potential permanent effects on the surrounding visual receptors.	opportunities for local landscape and biodiversity enhancement, and continue to be developed as part of the iterative process of design and assessment. The principles of the outline landscape strategy, which will inform the future design development for DCO submission, will seek to:	
		- Respond to both the immediate landscape pattern of the site and the wider character;	
		- Strengthen the existing landscape framework of the siting locations, extending and enhancing connections with native woodland planting to provide structural screening to the converter stations;	
		- Potentially introduce native hedgerow and tree planting for surrounding settlement where appropriate, including but not limited to Ingleborough, West Walton and connecting roads.	
		<ul> <li>Where practical and advantageous, secure advanced planting to establish areas of mitigation planting prior to construction commencing; and</li> </ul>	
		- Set out monitoring and maintenance of new planting / seeding to ensure successful establishment.	
Landscape character units and visual receptors	Landscape integration of replacement and enhancement planting.	A five-year aftercare period will be established for all reinstatement and mitigation planting.	LV03

# 8.7 Scope of the Assessment

## **Spatial Scope and Study Area**

- 8.7.1 The spatial scope for assessing landscape effects has been established through a combination of desk study and field work to establish key landscape components, such as vegetation, perceptual qualities, including views and overall landscape character that may be affected by the English Onshore Scheme. The purpose of these initial studies was to establish the extent of landscape, components and characteristics, that may be significantly affected by considering relationships with features of heritage and ecological value and landscape designations such as the Lincolnshire Wolds National Landscape.
- 8.7.2 The spatial scope of assessment for visual effects has been informed by identifying the area in which the English Onshore Scheme is likely to be visible and where visual receptors have the potential to be significantly affected, verified through field surveys and professional judgement. The study area is set at 2 km from the draft Order Limits for the indicative zone for underground cable assets, extending to 3 km around the indicative zone for converter stations and the indicative Walpole B Substation as illustrated in Volume 3, Part 2, Figure 8-4: Walpole Options A-D Zones of Theoretical Visibility (ZTV), excluding works to the existing 400 kV overhead Line and Volume 3, Part 2, Figure 8-5: Walpole Options A-D Zones of Theoretical Visibility (ZTV), including works to the existing 400 kV overhead Line.
- 8.7.3 The spatial scope has been further informed through the mapping of preliminary ZTVs for the indicative zone for converter stations and indicative Walpole B Substation and works to the existing 400 kV overhead Line which assume a 'worst-case' scenario in respect of Rochdale envelopes (see Volume 3, Part 2, Figure 8-4: Walpole Options A-D Zones of Theoretical Visibility (ZTV), excluding works to the existing 400 kV overhead Line and Volume 3, Part 2, Figure 8-5: Walpole Options A-D Zones of Theoretical Visibility (ZTV), including works to the existing 400 kV overhead Line). ZTVs in relation to the indicative zone for underground cable assets have not been generated as there is no permanent above ground infrastructure associated with this aspect of the English Onshore Scheme. The ZTVs have been referenced, in combination with further site-based appraisal and additional desk study to consider any likelihood of potential significant effect, to ensure a proportionate approach is followed which focusses on potentially significant effects.
- 8.7.4 The study area extends to Mean High Water Springs (MHWS) levels along the coastline. It is important to note that the study area defines the area within which it is judged that significant landscape and/or visual effects could occur, rather than the full extent of visibility of the English Onshore Scheme. In accordance with paragraph 5.2 of GLVIA 3 (Ref 8.4) it is recognised that the selection of receptors may change as the English Onshore Scheme progresses, for example as a result of field work and changes to the design. Some receptors within the study area may have very localised theoretical visibility indicated by the ZTV for example, from isolated locations on the edge of a settlement. In some instances, field surveys can establish that intervisibility from particular locations would, in reality, be further restricted by landscape elements not included in the ZTV models, for example, walls, fences, hedgerows and tree cover outside the larger woodland blocks.
- 8.7.5 Since issue of the Scoping Opinion changes to the Projects design has resulted in Fenland District Council and Cambridgeshire County Council falling within the draft

Order Limits. Whilst the preliminary assessment has taken account of the relevant baseline information for these local planning authorities the scope of the assessment remains unchanged.

8.7.6 The outline assessment of effects will further refine the spatial scope.

#### **Temporal Scope**

- 8.7.7 The temporal scope of the assessment of Landscape and Visual is consistent with the period over which the English Onshore Scheme would be carried out. It covers the main period of construction anticipated to last approximately 6 years, starting in 2028, with the Projects expected to be operational by Q4 2033.
- 8.7.8 Permanent effects correspond to operational effects that include permanent and temporary changes associated with maintenance. Operational effects are expected to be permanent. At the PEIR stage, landscape assessment has been undertaken with the reference to the following stages of the Project:
  - Construction.
  - Operation Year 1.
  - Operation Year 15.
- 8.7.9 Visual assessment has been undertaken with the reference to the construction and operational stage. More detailed assessment of operational stage will be undertaken within ES.
- 8.7.10 The English Onshore Scheme is expected to be permanent and with lifespan of more than 40 years. If decommissioning is required at this point in time, then activities and effects associated with the decommissioning phase are expected to be of a similar level to those during the construction phase works, albeit with a lesser duration of two years. Acknowledging the complexities of completing a detailed assessment for decommissioning works up to 40 years in the future, it is considered that the significance of effects relating to the decommissioning phase would be no greater than those from the construction phase and decommissioning effects are not discussed in detail in this chapter. However, **Table 4.21** in **Volume 1**, **Part 1**, **Chapter 4**: **Description of the Projects** provides a high level summary assessment of the potentially significant effects associated with decommissioning. Furthermore, should decommissioning take place it is expected that an assessment in accordance with the legislation and guidance at the time of decommissioning would be undertaken.

#### **Identification of Receptors**

8.7.11 The principal landscape and visual receptors that have been identified the likelihood of being subject to potential significant effects are summarised in **Table 8-9** and are shown in **Volume 3**, **Part 2**, **Figure 8-2**: **Local Landscape Character Areas**.

Table 8-9 - Landscape and Visual Receptors Subject to Potential Effects

Receptor	Reason for consideration
Landscape Receptors	
Existing landscape elements within the draft Order Limits.	A combination of existing landscape elements which contribute to the characteristics of a landscape, where removal could result in direct effects.
Landscape Character Units	Potential direct and indirect effects on the key qualities of identified landscape character units, which form part of the landscape character assessment.
Landscape Designations	Landscape Designations, such as National Landscapes, which could experience direct and indirect effects.
Visual Receptors	
Local communities including occupiers of residential properties, users of local facilities and in places of work.	Residents have a strong interest in their immediate visual environment.
People using nationally designated or regionally promoted footpaths, local PRoW, cycle routes and navigable waterways.	Where the enjoyment of views is likely to be a key aspect of the activity being undertaken.
Users of recreational outdoor facilities	Where the enjoyment of the views may be considered an aspect of the activity being undertaken, such as public parks, golf courses and visitor attractions.
Users of public roads and railways	Travellers in vehicles where the visual environment forms a main aspect of the journey experience, including users of A-, B-roads and unclassified roads within the study area.  Train passengers where views of the local landscape form a part of the journey experience.

## **Potential Effects Considered within This Assessment**

8.7.12 The effects on Landscape and Visual receptors, which have the potential to be significant and have been taken forward for detailed assessment, are summarised in **Table 8-10**.

Table 8-10 - Landscape and Visual Receptors Scoped in for Further Assessment

Receptor	Reason for consideration
Existing landscape elements within the draft Order Limits may be subject to direct effects.	A combination of existing landscape elements contributes to the characteristic of landscape character. Potential changes to existing landscape elements will inform the assessment of landscape character effects on identified landscape character units.
Landscape Character Units within the study area limits.	The effects on the key qualities of identified landscape character units form part of landscape character assessment. The addition of man-made landscape elements can potentially affect the existing landscape character. The potential introduction of elements associated with the English Onshore Scheme will inform the assessment of landscape character effects on identified landscape character units.
Landscape Designations.	Landscape Designations such as National Landscapes are protected, and the proposals are required not to detract from the natural beauty of the National Landscape.
Local communities, including occupiers of residential properties, users of local facilities and in places of work within the 2 km study area for the indicative zone for underground cable assets and 3 km study area from the indicative zone for converter stations and indicative Walpole B Substation at Walpole.  Where ZTV analysis indicates a theoretical visibility of above ground structures (the indicative zone for converter stations and indicative Walpole B Substation) beyond the 3km study area limits at the indicative zone for converter stations, such areas will be verified and, if judged likely for there to be a potential for significant effect, included within the spatial scope.	Residents have a strong interest in their immediate environment and may be potentially impacted by the presence of temporary construction activity, the temporary or permanent loss of vegetation or the permanent appearance of above-ground structures within the landscape during operation (indicative zone for converter stations and indicative Walpole B Substation).  Residential receptors may potentially be subject to night-time impacts during construction, due to temporary lighting measures for construction compounds and during operation due to the permanent motion activated lighting requirements of above-ground structures (the indicative zone for converter stations and indicative Walpole B Substation).
People using nationally designated or regionally promoted footpaths, local PRoW, cycle routes and	The attention of recreational users may be focused on the surrounding landscape and may be potentially

Receptor	Reason for consideration
navigable waterways within the 2 km and 3 km study area limits	impacted upon by the presence of temporary construction activity, the temporary or permanent loss of vegetation or the permanent appearance of above-ground structures within the landscape at operation (indicative zone for converter stations and indicative Walpole B Substation).
Visitors to recreational outdoor facilities	Where the enjoyment of the views may be similarly impacted upon for the above stated reasons.
Users of public roads and railways	Where the enjoyment of views is a main part of the journey; during construction and for above ground structures during operation.

8.7.13 The receptors/effects detailed in **Table 8-11** have been scoped out from being subject to further assessment because the potential effects are not considered likely to be significant.

Table 8-11 - Summary of Effects Scoped Out of the Landscape and Visual Assessment

Receptors/potential effects	Justification
Existing landscape elements, Landscape Character Units falling outside of the 2 km / 3 km study area thresholds. alongside Landscape Character Units within 2km/3km study area not affected directly.	The change to the Landscape Character Units not affected directly will be limited to perceptual and aesthetic qualities. Therefore, any change would be indirect, limited to views and other perceptual characteristics such as tranquillity and sense of wildness, but at this distance the change will be either screened completely or barely perceptible.
Visual receptors located beyond the defined study areas.	Visual receptors beyond the identified 2km and 3km study areas, where views toward the construction / operational phases of the English Onshore Scheme are either obscured or at a distance where the magnitude of change experienced would be no higher than negligible.
	ZTV mapping for the indicative Walpole B Substation and indicative zone for converter stations Options A-D provides an indication of theoretical visibility beyond the study area limit, although the preliminary assessment would suggest that the potential for significant effect is unlikely beyond 3 km. Areas of theoretical

Receptors/potential effects	Justification
	visibility will however be verified and, if necessary included within the spatial scope for the ES.
Night-time effects on recreational receptors (construction and operation)	Recreational activity on footpaths, cycleways and waterways would be reasonably expected to take place in daytime hours only, and are scoped out of night-time assessments for construction and operational phases.

# 8.8 Key Parameters for Assessment

### Realistic Worst-Case Design Scenario

- 8.8.1 The assessment has followed the Rochdale Envelope approach as outlined in Volume 1, Part 1, Chapter 4: Description of the Projects and Volume 1, Part 1, Chapter 5: PEIR Approach and Methodology of the PEIR. The assessment of effects has been based on the description of the Projects and parameters outlined in Volume 1, Part 1, Chapter 4: Description of the Projects. However, where there is uncertainty regarding a particular design parameter, the realistic worst-case design parameters are provided below with regards to Landscape and Visual amenity, along with the reasons why these parameters are considered worst-case. The preliminary assessment for Landscape and Visual amenity has been undertaken on this basis. Effects of greater adverse significance are not likely to arise should any other development scenario, based on details within the Rochdale Envelope (such as different infrastructure layout within the draft Order Limits), to that assessed here be taken forward in the final design scheme.
- 8.8.2 In relation to Landscape and Visual Amenity, the following assumptions are made regarding the Projects' design parameters in order to ensure a realistic worst-case assessment has been undertaken.
  - As set out in Volume 1, Part 1, Chapter 4: Description of the Projects, and specifically in **Section 4.4**, at this stage in the design process, four options (Options A, B, C, and D) have been identified with regards to the proposed siting of the Walpole converter stations and a preliminary landscape and visual assessment has been undertaken for each (Sections 8.10 and 8.11). The worstcase assumption is that the converter stations may be sited anywhere within the indicative zones for converter stations considered. Vertical maximum design parameters are also defined for the Walpole B Substation (15 m), works to the overhead power line (56m) and the converter stations (31.7 m, combining a maximum built form of 30 m plus a potential platform height of 1.7 m above AOD). ZTVs generated for the indicative Walpole B Substation, converter station Options and works to the existing 400 kV overhead Line (see Volume 3, Part 2, Figure 8-4: Walpole Options A-D Zones of Theoretical Visibility (ZTV), excluding works to the existing 400 kV overhead Line and Volume 3, Part 2, Figure 8-5: Walpole Options A-D Zones of Theoretical Visibility (ZTV), including works to the existing 400 kV overhead Line) have adopted these parameters in the creation of a Rochdale Envelope for each element.

- It is envisaged that there will be embedded landscape environmental measures (specifically, 'design measures') introduced as part of the detailed design consideration of the converter stations. However, due to the extent of options being considered and the current level of design certainty, the worst-case assumption for the PEIR is that no landscape environmental design measures are in place and are not accounted for in the preliminary assessment.
- Any specific architectural approaches / rationale for the converter station structures will be subject to further design refinement; none have been referenced for the preliminary assessment, which is based on an assumption of overall massing and not the detail of the built form.
- The full extent and arrangement of proposed trenchless crossing locations is to be determined. A worst-case assumption has been made that, unless where trenchless crossings are confirmed at this stage, then for open cut installation where the indicative cable route crosses field boundary hedgerows or other vegetation there would be a likely loss of vegetation corresponding to the working width associated with the HVDC cable (76 m) and the HVAC cable (135 m). It is envisaged that the inclusion of trenchless crossings will ultimately reduce the likelihood of potentially significant effects at the detailed assessment stage, along with any localised alterations made to the working width of the construction corridors to minimise the loss of vegetation where this can be achieved.
- The indicative cable route (and indicative zone for underground cable assets) has been assumed as a reasonable basis for the preliminary assessment, where it represents a realistic representation of the extent of physical change that would occur. It is, however, acknowledged that the indicative cable route could move within the indicative zone for underground cable assets. Where this is likely to imply a worse-case scenario for nearby visual receptors, this has been considered in the judgements relating to the likelihood of potentially significant effect. Where optionality is presented within the indicative zone for underground cable assets, all route options have been considered.
- For construction compounds, the worst-case assumption is that they may be
  potentially sited anywhere within the extent of the indicative zone for construction
  compounds identified.
- For the reinstatement of vegetation lost to construction along the indicative cable route and indicative zone for underground cable assets, the worst-case assumption is that the reinstatement boundary hedge planting is achievable but will not include tree planting over easement restrictions for each of the EGL 3 Project and EGL 4 Project.

## **Consideration of Construction Scenarios**

As detailed in **Volume 1, Part 1, Chapter 4: Description of the Projects**, the timing of construction activities set out within this PEIR is indicative. It has been identified that elements of the Projects could be constructed sequentially or concurrently. To allow for any unexpected circumstances and a realistic worst-case assessment, the impact assessment for the English Onshore Scheme considers that assuming that elements of the English Onshore Scheme would be constructed concurrently to be a worst-case scenario for the assessment of landscape and visual amenity effects. This has greater potential for an increased magnitude of change, as experienced by visual receptors.

# 8.9 Assessment Methodology

#### Overview

- 8.9.1 The generic project-wide approach to the assessment methodology is set out in Volume 1, Part 1, Chapter 5: PEIR Approach and Methodology, and specifically in Sections 5.4 to 5.6. However, whilst this has informed the approach that has been used in this Landscape and Visual assessment, it is necessary to set out how this methodology has been applied, and adapted as appropriate, to address the specific needs of this Landscape and Visual assessment. Details are provided below.
- 8.9.2 The LVIA methodology broadly follows the terminology described in **Volume 2**, **Part 1**, **Appendix 2.8.A: Landscape and Visual Assessment methodology**, however, in order to provide the necessary level of assessment detail, additional levels of sensitivity and magnitude have been used to allow for a finer grain of preliminary assessment.

### **Landscape Assessment Methodology**

8.9.3 Landscape effects refer to the impact of a proposed development on the character and quality of the landscape. Changes in the landscape occur through the addition of new features or the subtraction of existing features, such as vegetation, resulting in a change to the landscape character, defined as a distinct and recognisable pattern of elements and features characteristic for a particular landscape. Detailed landscape assessment methodology is described in **Volume 2**, **Part 2**, **Appendix 2.8.A: Landscape and Visual Assessment Methodology**.

### Landscape Receptor Sensitivity

- 8.9.4 The sensitivity of the landscape receptor has been derived by combining the value of the landscape (undertaken as part of the baseline study) and the receptor's susceptibility to change to the specific type of development being assessed.
- 8.9.5 Landscape susceptibility relates to the ability of a particular landscape to accommodate the English Onshore Scheme. It is assessed through consideration of the baseline characteristics and attributes of the landscape, and in particular landform, land use, presence of woodlands and hedgerows, scale of landscape and other factors. Landscape value is frequently addressed by reference to international, national, regional and local designations determined by statutory bodies and planning authorities. However, the absence of such a designation does not necessarily imply a lack of quality or value. Various other factors are considered in determining landscape value, which can render areas of nationally unremarkable quality valuable as a local landscape resource. In line with methodology outlined in Volume 2, Part 2, Appendix 2.8.A: Landscape and Visual Assessment Methodology, the effects have been assessed with the reference to four point scale, high, medium, low and negligible of landscape sensitivity.

#### Magnitude of Landscape Impacts

8.9.6 The magnitude of landscape impact refers to the extent to which the English Onshore Scheme would alter the existing characteristics of the landscape. It is an expression of the size or scale of change to the landscape, the geographical extent of the area influenced and its duration and reversibility. Similarly, the magnitude of landscape

effects has been assessed with the reference to four-point sale, high, medium, low and negligible of landscape sensitivity.

#### Significance of Landscape Effect

8.9.7 Combination of magnitude and sensitivity indicates the relative importance of different effects. This, combined using professional judgement, allows us to evaluate effects and to determine the significance.

### **Visual Assessment Methodology**

#### Assessment of Visual Effects

8.9.8 The visual effects are assessed based on considerations of visual sensitivity and visual magnitude of change to establish their significance.

### Visual Sensitivity

8.9.9 The identified visual receptors in the assessment have been assessed in terms of their susceptibility to change in views, visual amenity, and the value attached to particular views.

#### Visual Value

- 8.9.10 Visual value refers to the value attached to the views that take into account the following:
  - Recognition of the value attached to particular views highlighted through planning policy, planning designations, Landscape Character Assessments, or cultural and historical associations; and,
  - Indicators of value attached by visitors, for example, through appearance in guidebooks, tourist maps, recognised visitor attractions, and views included in poetry and referenced in art and literature.

#### Visual Susceptibility

8.9.11 The susceptibility of a visual receptor relates to the type of receptor and its purpose for being there, which influences its ability to accommodate a development of the type proposed without undue consequences for maintaining the baseline visual situation.

#### Visual Sensitivity

8.9.12 Visual susceptibility and value can be combined in different ways to form a judgement about the visual sensitivity of a given receptor. It is generally accepted that a combination of high susceptibility and high value is likely to result in the highest sensitivity. In contrast, a low susceptibility and low value is likely to result in the lowest level of sensitivity.

#### Magnitude of Visual Change

8.9.13 The magnitude of visual change depends upon a combination of factors, including the size, scale and nature of change in relation to the context, the geographical extent of the area influenced, and its duration and reversibility. GLVIA 3 (Ref 8.4) advises that it is helpful to consider (but not be restricted to) the following:

- Size/Scale of change: The size/scale of change to the visual receptors will arise because the views could be altered through the addition or loss of the existing landscape features, level of contrast in the views and how the proposed scheme elements fit within existing views.
- Geographical extent of change:
   The geographical extent of the visual effect varies between viewpoints and reflects the angle of the view, the distance from a proposed development, and the extent of the area over which the change would be visible.
- Duration and reversibility:
   Duration and reversibility are separate but linked considerations relating to the duration of change, applicable to each stage of a proposed development and whether the change in the views is reversible.

# Significance

- 8.9.14 Final conclusions about the significance require separate combined judgments about the sensitivity of the visual receptors and the magnitude of visual effects to allow a final judgment about whether the effects are significant or not.
- 8.9.15 The assessments within this chapter consider effects of moderate and greater levels of effect to be significant, while those less than moderate are not significant

#### **Preliminary Assessment of Cumulative Effects**

- 8.9.16 At the current stage of the Projects (PEIR stage), design information for the Projects is insufficient to allow for a robust cumulative assessment to be undertaken. Furthermore, given the current position in relation to baseline data collection, with much of the environmental surveys still to be undertaken during 2025, the baseline identified at this PEIR stage cannot be taken as a complete picture of the potential presence and significance of sensitive receptors. Therefore, a cumulative assessment has not been undertaken at this stage; however, Volume 1, Part 4, Chapter 28:

  Cumulative Effects, presents the long and short lists of 'other developments' which will be considered at the ES stage, and the methodology which allowed for the identification of these other developments, to allow consultation bodies to form a view and provide comment on the other developments included. The long-list will be reviewed and if necessary, updated, in the lead up to the production of the ES, as the Projects' design further evolves and in response to any comments raised at statutory consultation.
- 8.9.17 Combined effects (sometimes called intra-project effects) result principally from different types of impacts from one development acting in combination on a specific receptor. The IMEA guidelines (2004) (8.34) refer to Intra-project effects when a single receptor is affected by more than one source of effect arising from different aspects of the English Onshore Scheme. An example of an intra-project effect will be where a resident is affected by dust, noise and traffic disruption during the construction of a scheme, with the result being a greater level of effect than each individual effect alone.
- 8.9.18 The initial findings reported in the specialist chapters have been considered to identify potential interactions between Landscape and Visual Assessment effects upon single receptors. The initial review identified the following other types of environmental impacts, that interact with the single identified landscape and visual receptors:

- Cultural Heritage (Volume 1, Part 2, Chapter 7).
- Biodiversity (Volume 1, Part 2, Chapter 6).
- Noise and Vibration (Volume 1, Part 2, Chapter 13).
- 8.9.19 As effects identified in other sections of the PEIR are still under the consideration due to continuous iterative design process, the intra-cumulative effects will be identified at the ES Stage.

# 8.10 Preliminary Assessment of Landscape Effects

### **Effects on Landscape Designations**

#### Lincolnshire Wolds National Landscape

### Sensitivity:

8.10.1 The sensitivity of the Lincolnshire Wolds has been recognised through its designation as a National Landscape, with the main purpose of "conserving and protecting natural beauty", and therefore is of high sensitivity. The special qualities of this designated landscape are detailed within the Lincolnshire Wolds AONB Management Plan 2018-2023 (Ref 8.28). It's worth noting that although the sensitivity of the entire designation is high, the degree to which the unique qualities are represented in parts of the designated area varies.

#### Magnitude of Change

- 8.10.2 The sections below outline the magnitude of change of landscape effects at construction, year 1 and year 15.
- 8.10.3 Construction: Approximately 100 km of the HVDC underground cable would be required from the landfall point at Anderby Creek to the Walpole converter stations. Approximately 0.74 km of the cable route traverses the Lincolnshire Wolds National Landscape. The indicative zone for underground cable assets would cross the southern end of the designated area within the boundaries of East Lindsey District Council.
- 8 10 4 Undergrounding of the indicative cable route within Lincolnshire Wolds National Landscape would require stripping topsoil and removing vegetation within draft Order Limits. A temporary haul road of crushed stone would likely be required within the working area to enable access from A1028/Bakers Lane. Works would require the erection of the construction of fencing. During construction, a combination of trenches and trenchless crossings under local roads would be required. Within trenches the cables would be installed within protective ducts and covered by protective tiles. After the cables are laid, the trench will be backfilled, section by section, with the temporary haul road removed. Topsoil will be reinstated alongside vegetation and any enhancement planting. None of the indicative zone for construction compounds will be located within the boundaries of Lincolnshire Wolds National Landscape. Construction would result in a limited loss of field boundary hedgerows and hedgerow trees between the B1196, A1028 and A158. The indicative cable route will cross underground below the tree belt, linking Gunby Hall, a Grade II Registered Park and Garden, with nearby Candlesby village. Due to the trenchless method crossing being

- used to underground the HVDC cable, it is expected that all trees within the tree belt will be retained.
- 8.10.5 Construction associated with underground cabling would be uncharacteristic within the rural and generally quiet and tranquil landscapes, which will directly affect the high scenic beauty and rural charm, which depends almost entirely upon the agricultural land use.
- 8.10.6 There would be intermittent loss of tranquillity due to noise, vehicle movement, and short-term changes to land use, including fencing and topsoil stockpiles, across a small extent of the designated area.
- 8.10.7 These changes would be perceptible primarily in local views from Public Footpath No. Cand/230/1, that would be temporarily closed or diverted for the duration of construction and raised sections of the PRoW No Cand/225/1 and WeLM/225/1 at Candlesby Hill. The landform rises gently or more steeply creating local ridges that generally would restrict visibility in combination with woodlands such as Welton or Willoughby Woods.
- 8.10.8 Construction would not affect the existing woodland linked to the estate landscape near Gunby Hall.Other qualities of the historic landscape and buildings would not be affected.
- 8.10.9 The construction would be short-term, affecting a small extent of the designated area and being small in scale and size. This would result in a high magnitude of change locally, but overall, there would be a **medium** magnitude of change in the Lincolnshire Wolds National Landscape.
- 8.10.10 **Year 1**: After completion, there will be very few signs of development above ground except for marker posts. The land will be returned to its pre-development use and physical condition upon reinstatement, while crops may not be fully restored. Although replacement planting will be completed, it will not be fully matured and some loss of vegetation may be evident.. Overall, the magnitude of change will reduce to a low.
- 8.10.11 **Year 15:** All crops and hedgerows will be fully restored by year 15. Agricultural land use will be fully restored. Although some changes in vegetation pattern will be noticeable, the key characteristics of landscape, pattern of hedgerows, and land use will be maintained, resulting in the magnitude of change reducing to negligible.

#### **Effects on the Setting of the Lincolnshire Wolds National Landscape**

8.10.12 The setting of the Lincolnshire Wolds National Landscape is not specifically defined in the Lincolnshire Wolds AONB Management Plan (2013-2018) (Ref 8.28). However, it is typically referred to as an adjacent area, and as defined by some, extending as far as the visibility from the designated area or surrounding landscape visually or functionally linked with the designated landscape. The setting of this designation comprises of transitional landscape

## **Other Designations**

8.10.13 Two registered Parks and Gardens are likely to be affected by the English Onshore Scheme. The preliminary assessment findings can be found in Volume 1, Part 2, Chapter 7: Cultural Heritage and Volume 2, Part 2, Appendix 2.7.D: Cultural Heritage Non-significant impacts, however, a brief description of potential changes to the landscape character and views has been included below.

#### Well Hall (Registered Parks & Gardens)

8.10.14 Well Hall (otherwise known as Wellvale Hall) is a country house within the civil parish and estate village of Well, Lincolnshire, England. This Grade II Registered Park and Garden is located approximately 1.5 km from the indicative zone for underground cable assets and is enclosed from the views of the English Onshore Scheme by existing large mature woodland blocks around the perimeter and isolated trees within the more central part of the garden. Therefore, there will be no direct changes, and indirect changes will also be very restricted as the views from the garden and house will be screened by perimeter vegetation. Distant views of construction will be available from PRoW No. Well/80/1, located along the eastern boundary of the Registered Park and Garden.

## Gunby Hall (Registered Parks & Gardens)

- 8.10.15 Gunby Hall Grade II Registered Park and Garden is a National Trust property. This designated area is adjacent to the southern part of Lincolnshire Wolds National Landscape. There will be no direct effects on this Registered Park and Garden. However, the works associated with undergrounding the HVDC cable route will occur just outside of the northern and western boundaries. The tree belt linking Gunby Hall with Candlesby village will be retained. .Construction will be visible to road users and visitors accessing this designated area from the A158, A1028 and B1196 roundabout junction.
- 8.10.16 Gunby Hall is a two-storey building with a part of the Hall being three-storeys. Although the views into the nearby Garden are open, further to the west, there is a range of mature solitary trees with a tree belt along the access road to the Hall that blocks the views further to the north. A dense woodland belt around the western and northern perimeter of the Garden will effectively screen the views of construction both from the Hall and the surrounding parkland.
- 8.10.17 The use of PRoW No. Cand/230/2 entering the park from the west will be temporarily closed or diverted alongside PRoW No. Gunb/231/1 entering the park from the north during construction. The change in the operational phase would be very limited, and it is envisaged that the landscape will be restored, and, in the longer term, a change to the landscape setting of Gunby Hall will be barely perceptible.

#### Effects on Landscape Character

- 8.10.18 The preliminary Landscape Character Assessment has been undertaken based on the landscape character of the draft Order Limits and the Landscape Character Units identified within published Landscape Character Assessments. Landscape Character Units that have the potential to be significantly affected are also detailed in **Section 8.1** of this chapter. The section below includes preliminary assessments of landscape effects presented with reference to the following components of the English Onshore Scheme:
  - Landfall Area at Anderby Creek;
  - HVDC and HVAC underground cables;
  - Walpole B Substation and converter stations; and
  - Works to the existing 400 kV overhead line.

8.10.19 These elements of the English Onshore Scheme have different characteristics and will affect landscape elements, landscape character, and associated perceptual qualities in different ways. Therefore, the potential effects are summarised below based on a more detailed assessment included in Volume 2, Part 2, Appendix 2.8.B:

Landscape Character Baseline and Assessment.

## **Landfall Area at Anderby Creek**

#### Construction

- 8.10.20 Construction of the landfall would lead to the localised disturbance caused by construction activities associated with vegetation removal. Construction would be carried out using horizontal directional drilling, however, some landform profiling would likely be required to provide a gradual slope from the sea running across the shoreline and dunes into the agricultural land where Transition Joint Bays (TJBs) would be installed, connecting onshore and offshore cable elements. A large compound area would be required to accommodate construction machinery, material set-down areas, and welfare facilities. This would result in local land use and landscape change through the introduction of uncharacteristic features associated with construction. The indicative zone for construction compounds alongside construction areas would be fenced off, with construction traffic utilising a temporary access track off the existing road network.
- 8.10.21 As the compound area would cover approximately 2.25 ha, there would be a localised loss of field boundary vegetation. Apart from hedgerows, some field boundaries are marked with drains with riparian vegetation, that would be lost through the diversion of drains or provision of temporary crossings or the indicative zone for construction compounds. Agricultural land would be excluded from growing crops to accommodate the indicative zone for construction compounds.
- 8.10.22 Any potential closures to the use of the PRoW and local beach will be diverted. Construction would also require the potential temporary closure or diversion of King Charles III England Coast Path National Trail alongside three PRoW (Hutt/10/4, Hutt/2/3, Hutt/4/4, Hutt 2/4 and Hutt/9/1), running perpendicularly to the coastline, affecting temporarily recreational opportunities. The presence of uncharacteristic features and activities would affect the tranquillity alongside views, noise, and memories of residents through a change to a relatively unspoilt coastline near the quiet village of Anderby Creek.
- 8.10.23 Overall, major adverse and significant effects have been identified for the Donna Nook to Gibraltar Point Naturalistic Coast LCA and moderate adverse and significant effects for the Tetney Lock to Skegness Coastal Outmarsh LCA, where the compound will extend.

#### Operation Year 1

8.10.24 The change to the landscape character would be minimal in year one as public access along the PRoW and shoreline would be restored. However, the change would be perceptible through the landform alteration and the establishment of mitigation planting. The TJB would be buried underground, with a small access manhole present at the ground level, although vegetation may not be fully established above it at year one. Manholes and marker posts are the only signs of work remaining above ground. Although trees would not be replanted directly over buried cables, hedgerows would be restored with trees outside the draft Order Limits to restore the existing landscape

pattern alongside habitats, provided as part of ecological mitigation. Although vegetation would not be fully established, agricultural land use would be largely restored. Overall, there would be major adverse and significant effects on Donna Nook to Gibraltar Point Naturalistic Coast LCA and moderate adverse but not significant on Tetney Lock to Skegness Coastal Outmarsh LCA.

### Operation Year 15

8.10.25 Mitigation and enhancement planting would largely restore the baseline scenario, although some trees would not fully mature by year 15. The landfall area connection would be covered by sand and further inland by habitats sympathetic to coastal areas. The landfall would be perceptible only through the inspection chamber over the TJB connection, presence of marker posts and barely perceptible landform alteration. The effects would reduce to minor adverse and not significant on Donna Nook to Gibraltar Point Naturalistic Coast LCA and Tetney Lock to Skegness Coastal Outmarsh LCA.

# **Undergrounding of HVDC and HVAC Cables**

8.10.26 Sections below outline the assessment of landscape effects associated with undergrounding of HVAC and HVDC cables. The **Volume 2**, **Part 2**, **Appendix 2.8.B: Landscape Character Baseline and Assessment** presents a more detailed assessment of landscape effects on identified landscape character units.

#### Construction

- 8.10.27 The indicative HVDC cable route would pass through several landscape character units. In contrast, the indicative HVAC cable route, approximately 5 km long would only pass through Terrington St John LCA, linking the indicative zone for converter stations and the indicative Walpole B Substation. Construction of both HVDC and HVAC underground cables would comprise trench excavation and temporary storage of topsoil and subsoil in storage bunds, resulting in similar changes within affected LCAs except for trenchless crossings, likely to be used in several locations. The access to the indicative zone for underground cable assets corridor would take place via temporary haul roads and existing access tracks. In places, there may be a requirement for temporary bridges/culvert crossings to allow for temporary haul road crossing of smaller ditches and drains.
- 8.10.28 Some loss of vegetation would occur at trenched crossings, and the extent of loss would vary from more wooded inland landscapes such as of Holten Le Clay to Great Steeping Middle Marsh LCA to more open landscapes of fens around Wash, such as Settled Fens Landscape Character Type, where there is very little field boundary vegetation. The perception of change at the construction stage in open fenland landscapes would be more significant than in agricultural landscapes with field boundaries defined by vegetation, such as within South East Claylands LCA. Construction activity, noise and vehicle movement would reduce tranquillity. A large-scale construction associated with underground cabling would be uncharacteristic within the rural and generally quiet and tranquil landscapes. Several trenchless crossings would be required along the route with several indicative zone for construction compounds
- 8.10.29 Installation of the indicative HVDC cable route would cross several Landscape Characterisation Units. Although the change in the landscape would be similar across the route, locally, the difference in identified effects reflects the geographical extent of construction works within LCA alongside the more subtle characteristics of the

receiving landscape, such as the presence of field boundary vegetation, openness, availability of scenic views and frequency of drains and the presence of permanent and construction compounds. Moderate adverse and significant effects have been identified for the LCA's such as Holton le Clay to Great Steeping Middle Marsh following by moderate adverse and significant identified for Wrangle Common to Freiston Ings Reclaimed Fen LCA, whilst minor adverse effects were identified for Wainfleet All Saints to Friskney Settled Fen LCA.

#### Year 1

8.10.30 The agricultural soil profile within the indicative cable route would be fully restored by year one, although crops may not be fully restored. The change in landscape would be perceptible mainly through gaps evident due to vegetation loss and marker posts discreetly highlighting the route alignment. The effects would reduce to not significant for most of the Landscape Character Units except for Terrington St. John LCA, where the Walpole B Substation alongside converter stations would be introduced, resulting in moderate adverse and significant effects.

#### Year 15

8.10.31 All crops and hedgerows would be fully restored by the year 15, except for trees that would not fully replace the size of some of the lost trees. The landscape effects associated with cable undergrounding would reduce to non-significant for all identified Landscape Character Units.

## **Walpole B Substation and Converter Stations**

- 8.10.32 The section below presents the effects on the landscape character of Terrington St. John LCA. The assessment of the Walpole B Substation and converter stations is presented in two stages below. Firstly, an overview of the magnitude of change has been presented in connection with the indicative Walpole B Substation and indicative zone for converter stations as illustrated in Volume 3, Part 2, Figure 8-4: Walpole Options A-D Zones of Theoretical Visibility (ZTV), excluding works to the existing 400 kV overhead Line. In addition, Volume 3, Part 2, Figure 8-5: Walpole Options A-D Zones of Theoretical Visibility (ZTV), including works to the existing 400 kV overhead Line shows the magnitude of change in connection with the indicative Walpole B Substation, the indicative zone for converter stations and works to the existing 400 kV overhead Line.
- 8.10.33 The second stage of the assessment includes a more detailed assessment with the reference to the converter stations Options, including the Walpole B Substation; however, as the Walpole B Substation is the common feature of all options, it is not a differentiating factor, therefore the assessment focuses in more detail on differentiating factors with reference to the converter stations Options.

# Stage 1 - Description of Landscape Change Resulting from Introducing the Walpole B Substation and Converter Station Options A, B, C and D.

#### Construction

8.10.34 The indicative Walpole B Substation would be located in a sparsely settled rural landscape between West Walton village and a group of farms along West Drove North Road. This landscape consists predominantly of small villages and hamlets. The fields

are frequently elongated, with occasional field boundary hedgerows, separated mainly by drains with wetland vegetation. Shelterbelts are occasionally present along local roads and farms such as Priory Farm.

8.10.35 The key change to the landscape character would result from large-scale construction, requiring approximately 15.4 ha to accommodate the functional footprint of the Walpole B Substation and approximately 8.8 ha of large platforms to accommodate two of the considered converter station options, with further requirements for accompanying infrastructure, such as attenuation ponds. As a result of construction associated with Walpole Substation B and all converter stations, a large-scale alteration of the landscape within Terrington St John LCA is expected due to the scale and size of change through the introduction of uncharacteristic construction activity and elements.

#### Year 1

8.10.36 The Walpole B Substation and indicative zone for converter stations would introduce large-scale energy infrastructure and permanent access tracks, altering the landscape character of Terrington St. John LCA. The indicative Walpole B Substation, indicative zone for converter substation and associated infrastructure would transform the landscape within the draft Order Limits and its surroundings from a predominantly rural landscape to one containing sizeable and interlinked energy transmission infrastructure. This change would reinforce the presence of existing energy infrastructure such as the Rose and Crown Solar Farm east of Ingleborough Farm and various other high-voltage overhead lines and towers that pass through the local landscape. The rural landscape outlook would be altered through changes to the colour, texture, pattern, and form associated with introducing new features. Other perceptual qualities, such as noise, would also be affected. The converter stations and Walpole B Substation would alter local land use and increase the enclosure of land cover.

#### Year 15

8.10.37 The proposed mitigation planting around Walpole Substation B would mature to provide a considerable degree of landscape integration; however, the change would continue, to a lesser extent, to affect perceptual qualities, including views. However, the size and scale of change, including mitigation planting, would only be partially compatible with the receiving landscape, which typically comprises very few woodlands and, more frequently, shelterbelts along farmsteads, hamlets and villages.

# Stage 2 – Detailed Assessment of Landscape Effects in Connection with Converter Stations Options A, B, C and D.

Landscape effects on Terrington St. John LCA

#### Sensitivity:

8.10.38 **Value:** This LCA does not include landscape or ecological designations and has very few features of heritage interest. There are very few PRoW within this LCA, although some limited recreational opportunities are associated with the Terrington St. John village. The landscape is generally in an intact condition. The skylines are cluttered in places, frequently featuring high-voltage overhead pylons; therefore, scenic qualities are of medium value. The tranquillity is at a medium level as few moderately busy

- roads cut through this LCA, whilst the perception of wildness is limited. Poplar windbreaks and occasional orchards are distinct landscape features alongside a historic network of dykes and drains. Overall, the landscape value is **medium**.
- 8.10.39 **Susceptibility**: The flat fenland landscape is of lower susceptibility to the proposed change. The medium scale farmed fields with very limited field boundary vegetation create a more open feel across the landscape, which is of lower susceptibility. Wide panoramic views across the fen landscape and beyond adjacent areas are frequently obstructed by masts, pylons, rows of poplars, and other detracting features, resulting in a medium susceptibility to views. The tranquillity is of higher susceptibility, but wildness is of lower susceptibility. This LCA will be affected directly. Overall, the susceptibility of the LCA is **medium**.
- 8.10.40 **Sensitivity:** Overall, this LCA is of **medium** sensitivity.

#### Magnitude of Change:

Construction

### **Option A**

8.10.41 There would be a medium extent of change across this LCA, with construction taking place east and west of Rose and Crown Farm Solar Farm. This Option would not require the diversion of the drain surrounding Rose and Crown Solar Farm; however, there would be a considerable requirement for trenchless crossings due to the relatively long indicative cable route linking the indicative zone for converter stations with the Walpole B Substation. Access along public access route would be affected only during construction. Overall, there would be considerable alteration to the landscape pattern and land use through the introduction of uncharacteristic features. The scale of change would be high across a medium extent of the LCA. Construction would be short-term and reversible, resulting in a high magnitude of change.

### **Option B**

8.10.42 This Option would result in a localised change in the landscape, with key construction activity taking place east of the Rose and Crown Farm Solar Farm. It would require removal of solar arrays from one of the fields alongside the loss of perimeter hedgerows of very small scale with occasional trees. Access alongside Public Access Route would be severed permanently to accommodate one of the converter stations. This Option will require the diversion of a drain and the introduction of a series of medium scale drainage ponds. As the indicative cable route between the indicative zone for converter stations and the Walpole B Substation runs through the existing orchard off Mill Lane, there would be a loss to some orchard parcels and associated shelterbelts surrounding this orchard. Overall, there are good opportunities for introducing mitigation planting. The extent of change within the LCA would be low, while the scale of change would be large as construction would introduce a range of uncharacteristic features. The change will be short-term and reversible, resulting in a medium magnitude of change.

#### **Option C**

8.10.43 This Option would result in construction occupying large extent of the LCA, resulting in a large-scale of change as the indicative zone for converter stations are located far apart, resulting in a need for more extensive construction works associated with the indicative cable route, as there would be a requirement for two routes that eventually

would merge to provide a connection with the Walpole B Substation. There would be a large-scale change to the land use and landscape pattern combined with the introduction of uncharacteristic elements and activity. The change would be short-term and reversible, resulting in a **high** magnitude of change.

#### **Option D**

8.10.44 This Option would affect land use and landscape patterns within the Terrington St. John LCA. Due to the length of the indicative cable route, a large-scale excavation and several trenchless crossings would be required, which would affect field boundary vegetation and the existing orchard off Mill Lane to a greater extent than other options. There would be a large-scale change to the land use and landscape pattern, combined with the introduction of uncharacteristic elements and activity. The change would be short-term and reversible, resulting in a **high** magnitude of change.

#### Year 1

# **Option A:**

8.10.45 The key change would result from the introduction of converter stations, attenuation ponds, and the presence of permanent access. The magnitude of change would reduce to **medium** as the indicative zone for underground cable assets is restored to agricultural use, however, the converter stations with associated infrastructure would permanently alter the local landscape.

### **Option B**

8.10.46 The presence of the indicative zone for converter stations in close proximity would considerably alter the local landscape character; however, a change beyond the immediate vicinity of the indicative zone for converter stations would be limited, as agricultural land use would be restored along the working width of the indicative cable route. The change in vegetation pattern would also be limited as the loss of vegetation in construction would be of a very small scale. The magnitude of change would remain medium.

# **Option C**

8.10.47 The key source of change would be the presence of converter stations with associated infrastructure. However, due to the long indicative cable route associated with the indicative zone for converter stations spread far apart, the change in landscape pattern and vegetation pattern would also affect perceptual qualities such as views. The magnitude of change would remain **high**.

#### **Option D**

8.10.48 The presence of the indicative zone for converter stations and permanent access would be a key change in year one, altering the rural character of the moderately open landscape. Although the land use within the indicative zone for underground cable assets would be restored in year one, some change would remain as replacement planting would not fully restore the loss of vegetation. The magnitude of change would remain **high**.

#### Year 15

#### **Option A**

8.10.49 Mitigation planting does not form part of the consideration of effects on the proposed Converter Stations. Therefore, the magnitude of change would remain **medium**.

#### **Option B**

8.10.50 Mitigation planting does not form part of the consideration of effects on the proposed Converter Stations. Therefore, the magnitude of change would remain **medium**.

#### **Option C**

8.10.51 Mitigation planting does not form part of the consideration of effects on the proposed Converter Stations. Therefore, the magnitude of change would remain **high**.

#### **Option D**

8.10.52 Mitigation planting does not form part of the consideration of effects on the proposed Converter Stations. Therefore, the magnitude of change would remain **high**.

Table 8-12 - Summary of Landscape Effects - Converter Station Options

Option	Phase	Magnitude	Significance
Option A	Construction	High	Major adverse (significant)
	Year 1	Medium	Moderate adverse (significant)
			due to the large scale of change
	Year 15	Medium	Moderate adverse (significant)
			due to the large scale of change
Option B	Construction	Medium	Moderate adverse (significant)
			due to the large scale of change.
	Year 1	Medium	Moderate adverse (significant)
			due to the large scale of change
	Year 15	Medium	Moderate adverse (significant)
			due to the large scale of change
Option C	Construction	Medium	Moderate adverse (significant)
			due to the large scale of change.
	Year 1	Medium	Moderate adverse (significant)
			due to the large scale of change
	Year 15	Medium	Moderate adverse (significant)
			due to the large scale of change
Option D	Construction	High	Major adverse (significant)
	Year 1	High	Major adverse (significant)

Option	Phase	Magnitude	Significance
	Year 15	Medium	Major adverse (significant)

## **Overhead Power Line**

### Construction

- 8.10.53 The Walpole B Substation would require constructing a connection to the existing Burwell to Walpole 4ZM 400 kV overhead line adjacent to the west of the Walpole B Substation area. Supplementary work involving the temporary OHL diversion would be required. A temporary diversion would require the construction of two temporary OHL towers and a small section of diverted line to enable the connection of the existing pylons with the Walpole B Substation. The connection of downleads from the existing OHL towers to the CSEC and construction compound would require scaffolding. After the connection to the existing line, temporary diversion towers and overhead line connections would be removed.
- 8.10.54 As the existing pylons are located in the middle of the arable field, there would be no loss to the existing vegetation, but agricultural production would be disturbed during the construction period. The construction works would utilise the same access track from West North Drove and the temporary works area as the Walpole B Substation. As the works associated with the OHL connection would be located close to the Walpole B Substation, due to its proximity, they would be perceptible as part of the works related to the Walpole B Substation. The temporary associated works would be of large scale and size, affecting the landscape of Terrington St John, resulting in major adverse and significant effects.

### Year 1

8.10.55 The change in the landscape associated with the Walpole B Substation and works to the existing 400 kV overhead line would be perceptible as downleads would provide a connection with the CSEC. Agricultural land use in the vicinity of the existing OHL pylons would be largely restored. The indicative Walpole B Substation would remain a key source of impact on Terrington St. John LCA. The mitigation planting would not provide any landscape integration at year one. At year one **moderate adverse and significant** effects were identified on the Terrington St. John LCA largely as a result of the introduced Walpole B Substation and converter stations.

# Year 15

8.10.56 The mitigation planting would effectively integrate the Walpole B Substation and CSEC; however, mitigation measures would not provide effective screening to permanently introduced OHL towers. At year 15, the effects would reduce to **minor adverse and not significant.** 

# 8.11 Preliminary Assessment of Visual Effects

# **Underground HVDC Cables and HVAC Cables (Landscape Sections 1 - 8)**

8.11.1 The visual baseline identifies consistent character traits across the majority of the landscape in which the order limits are situated, the fenland environment being

predominantly flat and open, subject to intensive agricultural land use and with often far-reaching views interrupted by limited vegetation. Settlement pattern is consistently one of nucleated villages and scattered rural properties, connected by networks of rural lanes and bisected by major A-roads.

- 8.11.2 Proposed construction timescales and activities are detailed within **Volume 1**, **Part 1**, **Chapter 4**: **Description of the Projects** and are intended to take place over approximately 6 years. Within this phase there will be different levels of visible change potentially experienced, which may be considered of short-term duration in isolation but which in combination are considered as medium-term duration for the purpose of the assessment. The following will contribute to visual magnitudes of change:
  - Initial civils works (including the creation of construction compounds, enabling works, haul routes, excavations, installation of ducting for the indicative cable route and reinstatement of subsoils); this will represent the greatest level of activity and visual change within the construction phase;
  - Interim periods prior to cable laying, where the main visible elements will be the haul route, topsoil storage mounds, fencing and the continued presence of construction compounds over the duration of the works;
  - Cable installation processes (estimated as short-term in duration); and
  - Reinstatement works (including reinstatement of topsoils, deconstruction of construction compounds and any reinstatement of planting across trenched crossings).
- 8.11.3 A detailed assessment of visual effects, determining all magnitudes of change and assessment effects on receptors has not yet been fully undertaken, due to the potential for design change in relation to:
  - Any potential deviation of the indicative cable route within the indicative zone for underground cable assets.
  - The precise siting locations of construction compounds.
  - The extent of trenchless crossings and their method of construction, which will further inform the extent and location of vegetation loss likely to be experienced.
  - Potential additional loss of vegetation in relation to haul roads and junction modifications.
- 8.11.4 A precautionary approach has been adopted for the PEIR, in terms of considering a preliminary likelihood of potential significant effects based on the worst-case assumptions as set out and described. The potential for significant effects is judged to be most likely in the following situations, for visual receptors of a high overall sensitivity and with open views towards construction activity associated with the English Onshore Scheme where a medium (or higher) magnitude of change is predicted.
  - Residential receptors within approximately 250 m of the indicative cable route
    (and the indicative zone for underground cable assets), where the presence of
    construction activity may be highly noticeable in open views, or where the
    presence of indicative zone for construction compounds or the loss of vegetation
    due to construction may form locally prominent aspects of view, resulting in a
    medium or high magnitude of change. Such receptors may also potentially

- experience night-time effects, due to their relative proximity to construction compound locations subject to night-time lighting requirements.
- Residential receptors at an increased distance, typically towards a 500-600 m threshold although potentially upwards towards 1 km, where construction activity may be evident within open views and across a wide field of view, in combination with the presence of construction compounds and some loss of existing vegetation, potentially resulting in a medium magnitude of change.
- Recreational receptors using designated walking routes and local PRoW, cycle
  routes and navigable waterways, where the focus of activity involves an
  appreciation of the surrounding landscape and where sequential views may be
  affected over a geographical extent within approximately 500 m of the indicative
  cable route (and the indicative zone for underground cable assets); in particular
  where routes would approach and cross the indicative cable route, resulting in a
  potentially medium or high magnitude of visual change.
- 8.11.5 Beyond a distance threshold of approximately 1 km, the magnitude of change experienced by all visual receptors is likely to be no higher than low, which although may result in a moderate adverse effect (as per the assessment criteria) would be unlikely to be judged as significant. The presence and movement of construction plant and traffic, when viewed at greater distance would be comparable with agricultural practices consistent with the landscape; construction activity would not be viewed against the skyline and the construction compounds, where visible, would form minor components of typically wider views. Any combined extent of vegetation loss across the indicative zone for underground cable assets would not be readily noticeable.
- 8.11.6 Notwithstanding this, visual receptors at this distance remain scoped into the assessment due to the potential for any circumstance that may influence judgment conclusions on the magnitude of change experienced at any specific location. This would include particular landscape contexts, such as those of the Lincolnshire Wolds National Landscape and along the coastal setting of Anderby Creek, where locally elevated views allow for a greater appreciation of the surrounding landscape and where the value placed on these views is likely to have a greater emphasis.
- 8.11.7 Upwards of approximately 1.5 km and based on the site appraisal to date, it is considered highly unlikely for potential significant effect upon sensitive receptors to occur, due to the negligible level of change experienced at these greater distances in relation to the levels of construction activity predicted, and where the filtering and fragmentation of views by vegetation and settlement would further reduce the overall visibility of the construction.

# Walpole B Substation and Converter Station Options A - D (Landscape Section 8 Foul Anchor – Walpole)

8.11.8 The visual baseline identifies consistent landscape character traits across the Walpole area, the fenland landscape being level in profile and subject to predominantly agricultural and energy-related land uses, with often far-reaching views interrupted by blocks of vegetation surrounding areas of residential development and farmland. Villages are nucleated, although with linked or isolated residential properties and farmsteads intervening along rural lanes. There is a predominance of energy-related infrastructure visible across this landscape, where overhead power lines converge towards the existing Walpole A Substation.

- 8.11.9 A detailed assessment of visual effects, determining all magnitudes of change and assessment effects on receptors has not yet been fully undertaken for the likelihood of design change already set out for the indicative cable route, and also in relation to the four converter station options (Options A D). Further multi-discipline optioneering and consultations are necessary to determine the preferred option to be taken forward to detailed assessment.
- 8.11.10 The preliminary assessment and likelihood of potential significant effects is based on the worst-case assumptions as set out and described, including the definition of Rochdale envelopes for the converter stations (both vertical height limits and indicative zones). The indicative Walpole B Substation assumes an initial inclusion of landscape mitigation in relation to above-ground structures, whereas there is a worst-case assumption of no mitigation assumed for the indicative zone for converter stations.
- 8.11.11 From site appraisal, and with reference to ZTV mapping for the indicative Walpole B Substation, the converter station Options A D and works to the existing 400 kV overhead Line (refer to Volume 3, Part 2, Figure 8-4: Walpole Options A-D Zones of Theoretical Visibility (ZTV), excluding works to the existing 400 kV overhead Line and Volume 3, Part 2, Figure 8-5: Walpole Options A-D Zones of Theoretical Visibility (ZTV), including works to the existing 400 kV overhead Line) the potential for significant effect is judged to be most likely in the following situations, for visual receptors of a high overall sensitivity and with open views towards construction activity associated with the English Onshore Scheme where a medium, or higher, magnitude of change is predicted:
  - Residential and recreational receptors where the presence of construction activity
    is likely to be prominent or highly noticeable in open views, or where the presence
    of construction compounds or the loss of vegetation due to construction may form
    locally prominent aspects of view, resulting in a medium or high magnitude of
    change. Residential receptors may also potentially experience night-time effects,
    due to their relative proximity to construction compound locations subject to nighttime lighting requirements.
  - Residential and recreational receptors at an increased distance, typically towards a threshold of 2 km where construction activity may be evident in the middle distance of open views, or where construction visibility against the skyline would be noticeable, potentially resulting in a medium magnitude of change.
- 8.11.12 In excess of 2 km from the indicative zones for the converter stations, current site survey and desk-based appraisals would indicate that the visibility of the tallest construction elements of the converter stations and the works to the existing 400 kV overhead line would be restricted to their appearance only as skyline elements and predominantly screened at lower levels by combined layers of existing vegetation. The magnitude of change experienced is likely to be no higher than low, which, although may result in a moderate adverse effect (as per the assessment criteria) is unlikely to be judged as significant.
- 8.11.13 The ZTV mapping undertaken for the indicative Walpole B Substation and converter station Options A D (see Volume 3, Part 2, Figure 8-4: Walpole Options A-D Zones of Theoretical Visibility (ZTV)) would in theory suggest theoretical views towards the converter stations beyond the 3 km study area threshold. Site survey and desk-based assessment would, however, suggest that views from these greater distances are either substantially obscured by intervening vegetation / infrastructure or

- that any appearance as a skyline element would represent a negligible magnitude of change.
- 8.11.14 The receptor groups listed in **Table 8-13** and **Table 8-14** below geographically comprise the majority of those visual receptors falling into the above parameters of likely potential significant effects. The likelihood of significant effects for particular receptors and the reasoning for this is highlighted, whereas other receptors not described are judged to be unlikely to be significantly affected.

**Table 8-13 - Preliminary Summary of Visual Effects - Construction** 

Red	ceptor Location	Sensitivity C	riteria:	Significant Effect - Construction			
		View value	Susceptibility				
Landscape Section 1: Anderby Creek Landfall - Thurlby							
Anderby Creek (VP1, VP2, VP3):  Residential receptors of connecting roads between Anderby Creek and Anderby (Sea Rd and Huttoft Rd, and Huttoft Bank / Roman Bank)		High	High	Residents of properties along Sea Road, Huttoft Rd and Huttoft Bank / Roman Bank, where construction activity along the indicative zone for underground cable assets would pass within approximately 300 m and be readily or highly noticeable in views and where the indicative zone for underground cable assets and construction activity may be visible across a wide field of view, at 600-800 m.			
	Residential receptors at Anderby Creek settlement		For residents of properties at Ar zone for underground cable ass be visible across a wide field of For users of the England Coasta construction activity along the in	For residents of properties at Anderby Creek where the indicat zone for underground cable assets and construction activity many			
•	Recreational users of Anderby Creek Beach and Moggs Eye Beach			be visible across a wide field of view, at 600-800 m. For users of the England Coastal Path and PRoW where construction activity along the indicative zone for underground cable assets would pass within approximately 400 m and be			
	Recreational users of PRoW at between Anderby Creek and Anderby			visible to footpath users sequentially across a wide field of view.  The indicative zone for construction compounds to the east of Roman Bank would be a noticeable element within the views			
	Recreational users of the England Coastal Path			from nearby properties and users of the England Coastal Path. There would likely be a limited loss of hedgerow or roadside vegetation throughout this length, restricted to north of Anderby.			
Hut	ttoft Bank (VP1, VP2, VP3):	High	High	Residents along Huttoft Bank/Roman Bank, Jolly Common Lane, and Sea Lane where construction activity along the indicative			
	Residential receptors of connecting roads between			zone for underground cable assets may be visible across a wide field of view, at 600-800 m. Residents at Huttoft Bank where the indicative zone for			

Receptor Location	Sensitivity C	riteria:	Significant Effect - Construction
	View value	Susceptibility	
Huttfot Bank and Anderby/Anderby Creek (Huttoft Bank/Roman Ban Huttoft Rd, Jolly Common Lane, and Sea Lane).	•		underground cable assets and construction activity may be visible across a wide field of view, at 600-800 m.  Users of the England Coastal Path and PRoW where construction activity along the indicative zone for underground cable assets would pass within approximately 500 m and be
<ul> <li>Residential receptors at H Bank</li> </ul>	luttoft	visible to footpath users sequentially across a w The indicative zone for construction compounds Huttoft Bank/Roman Bank would be a noticeable the views from nearby properties and users of the Coastal Path. There would likely be negligible to	visible to footpath users sequentially across a wide field of view. The indicative zone for construction compounds to the east of
<ul> <li>Recreational users of And Creek Beach and Moggs Beach.</li> </ul>	•		the views from nearby properties and users of the England Coastal Path. There would likely be negligible loss of hedgerow or roadside vegetation throughout this length.
<ul> <li>Recreational users of PRobetween Anderby Creek a Huttoft Bank.</li> </ul>			
<ul> <li>Recreational users of the England Coastal Path.</li> </ul>			
<ul> <li>Anderby (VP4)</li> <li>Residential receptors of roat Anderby (Rectory Rd, SRd).</li> <li>Residential receptors at Anderby settlement</li> <li>Recreational users of PF at Anderby</li> </ul>	Sea	High	Residents of properties along Rectory Rd, Sea Rd where construction activity where construction activity along the indicative zone for underground cable assets would pass within approximately 300 m and be readily or highly noticeable in views and where the indicative zone for underground cable assets and construction activity may be visible across a wide field of view, a 600-800 m.  For residents of properties at Anderby where construction activity along the indicative zone for underground cable assets would pass within approximately 300 m and where the indicative zone for underground cable assets and construction activity may be visible across a wide field of view, at 600-800 m.  Recreational users of PRoW within 400 m, in particular the

Receptor Location	Sensitivity C	riteria:	Significant Effect - Construction	
	View value	Susceptibility	y	
			visible to footpath users sequentially across a wide field of view crossing the indicative cable route over a trenchless crossing.  The indicative zone for construction compounds to the east of Mumby Road would be a noticeable element within the views from nearby properties. There would likely be negligible loss of hedgerow or roadside vegetation throughout this length.	
<ul> <li>Residential receptors is connecting roads at His (Sutton Rd - A52, Murr A52 Rd) and Huttoff Re Alford Road</li> <li>Residential receptors a settlement</li> <li>Recreational users of I Huttoff</li> <li>Visitors and recreation of the Simon Field Farm Site, Captain Bluebells Park, and Sunny Ridge Caravan Park</li> </ul>	uttoft hby Rd - oad /  at Huttoft  PRoW at  al users m Camp s Touring	High	Residents of properties along the A52 Sutton Rd, A52 Mumby Rd and Huttoft / Alford Road where construction activity along the indicative zone for underground cable assets would pass within less than 300 m and be readily or highly noticeable in views, and where the indicative zone for underground cable assets and construction activity may be visible across a wide field of view, at 600-800 m.  For residents of properties at Huttoft settlement where construction activity along the indicative zone for underground cable assets would pass within less than 300 m and be readily or highly noticeable in views, and where the indicative zone for underground cable assets and construction activity may be visible across a wide field of view, at 600-800 m.  Recreational users of the PRoW between Thurlby and Huttoft within 400 m of the indicative zone for underground cable assets and connecting Rectory Road with the A52, which crosses the indicative cable route and would be visible to footpath users sequentially across a wide field of view.  The indicative zone for construction compounds to the east of Mumby Road would be a noticeable element within the views from nearby properties. There would likely be negligible loss of hedgerow or roadside vegetation throughout this length.	
Thurlby (VP5):	Medium	High	Residents of properties along Long Lane B1449, Huttoft Rd where construction activity along the indicative zone for	

Red	ceptor Location	Sensitivity C	riteria:	Significant Effect - Construction
		View value Susceptibility		y
•	Residential receptors along connecting roads (Long Lane B1449, Huttoft Rd) at Thurlby			underground cable assets would pass within less than 300 m and be readily or highly noticeable in views, and where the indicative zone for underground cable assets and construction activity may be visible across a wide field of view, at 600-800 m.
•	Residential receptors at Thurlby settlement			For residents of properties at Thurlby settlement where construction activity along the indicative zone for underground
•	Recreational users of PRoW cable assets would part Thurlby highly noticeable in view underground cable as	cable assets would pass within less than 300 m and be readily or highly noticeable in views and where the indicative zone for underground cable assets and construction activity may be visible across a wide field of view, at 600-800 m.		
				The indicative zone for construction compounds to the west of Alford Rd would be a noticeable element within the views from nearby properties. There would likely be some loss of hedgerow and / or roadside vegetation throughout this length.
Mul	mby (VP5)  Residential receptors between connecting Roads at Mumby (A52 Hogsthorpe Rd, A52 Station Rd, Washdyke Lane and Thrumber Marsh Lane)	Medium	High	Residents of properties along A52 Hogsthorpe Rd, A52 Station Rd, Washdyke Lane and Thrumber Marsh Lane where construction activity may be visible across a wide field of view, at 600-800 m.  Residents of properties at Mumby settlement where construction activity may be visible across a wide field of view, at 600-800 m.
•	Residential receptors at Mumby settlement			Recreational users of PRoW within 300 m of the indicative zone for underground cable assets which would be readily or highly noticeable in views visible to footpath users sequentially across a
•	Recreational users of PRoW at Mumby			wide field of view.  The closest indicative zone for construction compounds lies to the north of Rectory Rd and would be a minor element within the views from surrounding properties, located approx. 1 km from receptors. There would likely be negligible loss of hedgerow or roadside vegetation throughout this length.

Receptor Location	Sensitivity Cr	iteria:	Significant Effect - Construction
•	View value	Susceptibility	
Cumberworth (VP6):     Residential receptors along     Westfield Lane, Willoughby	Medium	High	Residents of properties within 400 m of the indicative zone for underground cable assets and with open, unrestricted views towards construction activity.
Road, and Alford Road			Recreational users of the PRoW within 500 m of the indicative
<ul> <li>Recreational users of PRoW connecting Farlesthorpe to Cumberworth</li> </ul>	which crosses the indicative zone and would be visible to footpath u field of view.  There would likely be negligible lo	zone for underground cable assets, particularly Cumb/365/1, which crosses the indicative zone for underground cable assets and would be visible to footpath users sequentially across a wide field of view.  There would likely be negligible loss of hedgerow / field boundary vegetation throughout this section.	
Farlesthorpe and Bonthorpe (VP7)		Residents of properties situated within 400 m of the indicative zone for underground cable assets where views are not	
<ul> <li>Residential receptors southeast of Farlesthorpe and within Bonthorpe</li> </ul>		p b	predominantly screened by intervening vegetation along field boundaries / pockets of woodland and which would be readily highly noticeable in views.
<ul> <li>Residential receptors along Farlesthorpe Rd and Cumberworth Road</li> </ul>			Recreational users of the PRoW within 500 m of the indicative zone for underground cable assets, particularly Cumb/365/1 and WiWS365/1 which cross the indicative zone for underground cable assets and would be visible to footpath users sequentially
<ul> <li>Recreational users of the Willoughby Branch Line Nature</li> </ul>			across a wide field of view.
Reserve and associated PRoW			There would likely be negligible loss of hedgerow / field boundary vegetation throughout this section.
<ul> <li>Recreational users of PRoW connecting Farlesthorpe to Cumberworth</li> </ul>			
Willoughby and Sloothby (VP8)	Medium	High	Residents of properties within 300 m of the indicative zone for
Residential receptors within the eastern edges of		J	underground cable assets and within 500 m of construction compound located north of Mill Lane, where vegetative screening

Receptor Location	Sensitivity C	riteria:	Significant Effect - Construction	
	View value Susceptibility		<i>,</i>	
Willoughby and western edges of Sloothby			is minimal or absent, particularly in close proximity to the proposed haul road, where vehicular movement and the plant movement would be seen cumulatively.	
Residential receptors along Hasthorpe Road, Hanby Lane, Bonthorpe Road, and Mill Lane.			Recreational users of the PRoW within 500 m of the indicative zone for underground cable assets and construction compound particularly WiWS/90/1 which crosses the indicative zone for underground cable assets and passes within 100 m of the	
Recreational users of PRoW from Sloothby to Willoughby			indicative zone for construction compounds and which would be readily or highly noticeable in views.	
and connecting Mill Lane to Bonthorpe Road			There would likely be some loss of hedgerow / field boundary vegetation near Sloothby (around Mill Lane and west of Green Lane).	
Welton Le Marsh (VP9):  Residential receptors at the eastern edges of Welton le Marsh and around Boothby	Medium	High	Residents of properties within 300 m of the indicative zone for underground cable assets and within 500 m of construction compounds where vegetative screening is minimal or absent, particularly in closer proximity to the proposed haul road which	
Residential receptors on the minor road connecting Welton le Marsh and Haberton, as well as Orby Bank	l		would be readily or highly noticeable in views.  There would likely be some loss of hedgerow / field boundary vegetation near Boothby.	
Recreational users of the PRoW around Boothby				
Landscape Section 3: Welton le M	arsh - Little St	teeping		
Orby (VP13):  Residential receptors in Orby and at the southern edges of	Medium	High	Residential receptors within 300 m of the indicative zone for underground cable assets, which would be readily or highly noticeable in views.	
Welton Le Marsh			Recreational users of the PRoW with 300 m where views are open toward the indicative zone for underground cable assets	

Red	eptor Location	Sensitivity C	riteria:	Significant Effect - Construction
		View value Susceptibility		y
•	Residential receptors along Burgh Rd, Orby Rd, Marsh			which would be trenched across the PRoW and readily or highly noticeable in views.
	Lane, Orby Bank and Boothby Grange			Visitors to Candlesby Park within 500 m where views are open toward the indicative zone for underground cable assets and
•	Recreational receptors along the PRoW leading from Orby to Welton le Marsh, within Orby, and leading from Orby to Orby Beck			indicative zone for construction compounds.  There would likely be some loss of hedgerow or roadside vegetation throughout this length, particularly between PRoW WeLM /226/1 and the B1196, and east of PRoW WeLM/226/1.
Car	dlesby (VP10)	High	High	Residential receptors with open views within 500 m of the
•	Recreational users within the Lincolnshire Wolds National			indicative zone for underground cable assets and indicative zone for construction compounds located east of the B1196.
	Landscape.			Recreational users of PRoW with 500 m where views are open toward the indicative zone for underground cable assets and
•	Settlements of Candlesby, Candlesby Hill and Scremby.			indicative zone for construction compounds, visible to footpath users sequentially across a wide field of view.
•	Residential receptors along Lowgate Road (A158), Gunby Road, Chalk Pit Lane, Baker's			Visitors to Candlesby Park within 500 m where views are open toward the indicative zone for underground cable assets and indicative zone for construction compounds.
	Lane (A1028)			There would likely be some loss of hedgerow or roadside vegetation throughout this length, particularly between Baker's
•	Recreational receptors on PRoW leading from Baker's Lane to Welton le March and from Scremby to Mill Lane			Lane and the B1196 south of the Lincolnshire Wolds National Landscape.
•	Visitors to Candlesby Park and Candlesby Hill Quarry Nature Reserve			

Rec	ceptor Location	Sensitivity C	riteria:	Significant Effect - Construction		
		View value	Susceptibility			
Gur	Residential receptors along A158 (Station Rd), and Gunby Lane Visitors to Gunby Estate Hall		Residents of properties within the settlements and surrounding areas within 300 m of the indicative zone for underground cable assets which would be readily or highly noticeable in views, and within 500 m of the indicative zone for construction compounds where vegetative screening of views is minimal or absent.			
•	and Gardens  Recreational users of the PRoW connecting Candlesby to Gunby and Sandy Lane, as well as the PRoW that lead from the Gunby Estate to Gunby Lane and North Road			Visitors to the Gunby Estate Hall and Gardens within 500 m of the indicative zone for underground cable assets and the indicative zone for construction compounds where views of vehicular movement may be seen through filtered vegetation. Recreational users of the PRoW with 500 m where views are open toward the indicative zone for underground cable assets and the indicative zone for construction compounds, visible to footpath users sequentially across a wide field of view. There would likely be negligible loss of hedgerow or roadside vegetation throughout this length due to trenchless crossings		
Great Steeping (VP14, VP15, VP16):  Settlement of Great Steeping		Medium High (Low for rail users)		Residents of properties within the settlements and surrounding areas of Great Steeping and Firsby within 300 m of the indicative zone for underground cable assets which would be readily or highly noticeable in views, and within 500 m of indicative zone for		
•	and Firsby  Residential receptors along B1195 (Hole Gate), School Lane, Airfield Road, and Bartons Lane and Ings Lane.					construction compounds where vegetative screening of views is minimal or absent.  Recreational users on the PRoW within 500 m where views are open and particularly where footpath Firs / 252 / 5 is within approximately 300 m of the indicative zone for construction
•	Recreational users of the PRoW in Firsby connecting to Eastfield Road and the B1195 Wainfleet Road and the PRoW from Great Steeping to Steeping River			compounds located south of Airfield Road, visible to footpath users sequentially across a wide field of view.  There would likely be some loss of hedgerow or roadside vegetation throughout this length, notably between the B1195 and Sandy Lane.		

Red	ceptor Location	Sensitivity C	riteria:	Significant Effect - Construction	
		View value Susceptibility		у	
•	Users of Steeping River				
•	Visitors / tourists using the Poacher Line (Grantham to Skegness Line) train				
Lar	ndscape Section 4: Little Steepi	ng - Sibsey N	orthlands		
Litt	Residential receptors in Little Steeping and along Bellwater Drain Bank, Royalty Bank, Thorpe Bank, Halton Fen and Station Road  Recreational receptors n PRoW leading between Halton Fen and Station Road, from Station Road to Fendike Bank, and from Ings Lane to Firsby	Medium	High (Low for rail users)	Residents of properties within Little Steeping and along Bellwater Drain Bank, Royalty Bank, Thorpe Bank, Halton Fen and Station Road within 500 m of the indicative zone for underground cable assets and within 500 m of the indicative zone for construction compounds, where vegetative screening is minimal or absent. Recreational users on the PRoW within 500 m where views are open and particularly where footpath HalH / 209 / 1 passes within 100 m of the indicative zone for construction compounds between Halton Fen and Station Road and would be readily or highly noticeable in sequential views.  There would likely be negligible loss of hedgerow or roadside	
•	Visitors / tourists on the Poacher Line (Grantham to Skegness) Line railway			vegetation throughout this length.	
Mic	Iville (VP18, VP20)  Residential receptors along Black Drove, Barlode Drain, Station Road, Hobhole Bank, Bellwater Bank, and Spilsby Road	Medium	High	Residents of properties along Black Drove, Barlode Drain, Station Road, Hobhole Bank, Bellwater Bank and Spilsby Road within 500 m of the indicative zone for underground cable assets and 700 m of the indicative zone for construction compounds where private garden vegetation is limited and views are wide reaching. Residents of properties within 300 m of the haul road along Black Drove, where vehicular and plant movement would be visible as readily noticeable components of view.	

Receptor Location		Sensitivity C	riteria:	Significant Effect - Construction
		View value Susceptibility		
•	Residential receptors along Thorpe Road and Thorpe Bank Recreational users of Witham Navigable Drain – Hobhole Drain and Bell Water Drain			Recreational users of Witham Navigable Drain – Hobhole Drain and Bell Water Drain where the indicative cable route would cross the watercourses (via trenchless crossing) and visible across a wide field of view.  There would likely be negligible loss of hedgerow or roadside vegetation throughout this length.
Hok	Phole (VP21):  Residential receptors on East Fen Lane, Hobhole Bank, and Midville Road / Fodderdyke Bank  Visitors to Waite's Farm Glamping	Medium	High	Residents of properties along East Fen Lane, Midville Road / Fodderdyke Bank, and Hobhole Bank within 400 m of construction activity where views are unrestricted. The effects would likely also be significant for residents with unrestricted views within 500 m of the indicative zone for construction compounds located south of Midville Road / Fodderdyke Bank. There would likely be negligible loss of hedgerow or roadside vegetation throughout this length.
Sib:	Residential receptors along the A16 Main Road, Pyemoor Lane and Hobhole Bank  Recreational users of Pyemoor Lane Recreation Ground  Users of the footpath (non adopted) along Hobhole Drain	Medium	High	Residents of properties along the A16 Main Road within 500 m of the indicative zone for underground cable assets where vegetative screening is limited and where views are unrestricted. The effects would likely also be significant within 500 m of the indicative zone for construction compounds located east of the A16 Main Road.  There would likely be a loss of hedgerow or roadside vegetation bordering the A16 and nearby field boundaries.
Lan	dscape Section 5: Sibsey North	hlands - Hubb	ert's Bridge	
Sib:	sey (VP23, VP24): Residential receptors along the B1184 Hale Lane, Willows Lane, Trader Bank and along	Medium	High	Residents of properties along B1184 Hale Lane, Willows Lane, Trader Bank, Fenside, Littlemoor Lane and along private drives connecting to Boston Road within 500 m of the indicative zone for underground cable assets where vegetative screening is limited.

Receptor Location	Sensitivity C	riteria:	Significant Effect - Construction
	View value	Susceptibility	
private drives connecting to Boston Road			The effects would likely also be significant within 500 m of the indicative zone for construction compounds west and east of the
<ul> <li>Residential receptors within Sibsey Northlands and Sibsey Fen Side, and along Staunts Lane, Fenside, Northlands Road, Goosemuck Lane, Littlemoor Lane</li> </ul>			West Fen Drain and east of the A16, particularly where visible in combination with other the indicative zone for construction compounds and / or trenched sections of the indicative zone for underground cable assets.  Recreational users of the PRoW Sibs/347/1 within 700 m of the indicative zone for underground cable assets with open sequential views, where the indicative zone for construction
<ul> <li>Residential receptors along Hurn Lane and High Ferry Lane</li> </ul>			compounds to the east of the A16 Main Road which would be a noticeable element of views.  There would likely be negligible loss of hedgerow or roadside
<ul> <li>Visitors to the Bridge Farm Caravan Park</li> </ul>			vegetation throughout this length due to trenchless crossings.
<ul> <li>Users of the PRoW within Sibsey Fen Side and Northlands.</li> </ul>			
Frithville (VP25):	Medium	High	Residents of properties along West Fen Drainside and the B1183
<ul> <li>Residential receptors along West Fen Drainside and the B1183 Boston Road</li> </ul>		redicational	Boston Road within 500 m of the indicative zone for underground cable assets and within 500 m of the indicative zone for construction compounds west and east of the West Fen Drain, particularly where they are viewed in combination and where
<ul> <li>Residential receptors along Fishtoft Drove</li> </ul>			vegetative screening is limited.  There would likely be negligible loss of hedgerow or roadside
Residential receptors within Cowbridge			vegetation throughout this length due to trenchless crossings.
Recreational receptors along     PRoW within Cowbridge			

Rec	eptor Location	Sensitivity Criteria:		Significant Effect - Construction
		View value S	Susceptibility	у
•	Visitors to the Boston Golf Club			
•	Recreational users of the Witham Navigable Drains – West Fen Drain, Medlam Drain, Stonebridge Drain, and Lush's Drain.			
Frith	Residential receptors along Fenside Road and Frith Bank	Medium	High (Medium for recreational	Residents of properties along Fenside Road and Frith Bank within 200-300 m of the indicative zone for underground cable assets where vegetative screening is minimal or absent and
•	Residential receptors along Mere Booth Road, Tattershall Road, and Bye Road		users of caravan / camping parks)	which would be readily or highly noticeable in views.  Recreational users of NCN 1 and the PRoW along the River Witham within 300 m of construction activity, where views are open to the southwest and northeast, as well as from the Half
•	Users of NCN 1 north of the River Witham		μ,	Bridge which provides an open viewpoint to the southwest.  There would likely be negligible loss of hedgerow or roadside
	Recreational users of the PRoW along River Witham and connecting Frith Bank Road to theiver Witham			vegetation throughout this length due to trenchless crossings.
•	Recreational users of the PRoW along Newham Drain and leading from Tattershall to River Witham			
•	Users of the River Witham Navigable Drains – Frith Bank and the River Witham			

Red	ceptor Location	Sensitivity C	riteria:	Significant Effect - Construction
		View value	Susceptibility	
•	Visitors to the Oak Tree Holiday Park			
•	Visitors to the Half Bridge			
	ston West / South Forty Foot in (VP 27):	Medium	High (Medium for	Residents of properties along Great Fen Road and Punchbowl Lane within 300 m of the indicative zone for underground cable
•	Residential receptors on Great Fen Road and Punchbowl Lane		recreational users of the golf club)	assets, which would be readily or highly noticeable in views, and within 500 m of the indicative zone for construction compounds where vegetative screening is minimal or absent.
•	Residential receptors along North Forty Foot Bank and Middle Drove		<b>G</b> ,	Recreational users on the PRoW leading to Punchbowl Lane within 500 m, where sequential views are open towards the indicative zone for construction compounds within the adjacent field.
•	Recreational users of the PRoW between the River Witham and Punchbowl Lane			Residential receptors along the B1192 Langrick Road.  The indicative zone for construction compounds to the north of the A1121 Boardsides would be a noticeable element within
•	Residential receptors along Langrick Road and visitors to the Boston West Golf Club			views from nearby properties, particularly along the A-road and Great Fen Road within 500 m where views are open. The indicative zone for construction compounds to the south of Punchbowl Lane would be a noticeable element for residences within 500 m.
				There would likely be negligible loss of hedgerow or roadside vegetation throughout this length due to trenchless crossings.
Lar	ndscape Section 6: Hubbert's B	ridge - Moulto	n Sea's End	
Hul	Residential receptors along Frampton Bank, the A52	Medium	High (Low for users of railways)	Residents of properties along Frampton Bank, the A52 Swineshead Road, and the A1121 Boardsides within 300 m of the indicative zone for underground cable assets which would be readily or highly noticeable in views, and within 500 m of the

Red	ceptor Location	Sensitivity C	riteria:	Significant Effect - Construction
		View value	Susceptibility	
	Swineshead Road, and the A1121 Boardsides			indicative zone for construction compounds where vegetative screening is minimal or absent.
•	Residential receptors along the B1192 Holmes Road, Kells Drove, and Fen Drove			Residents of properties along Malmsgate Lane, Washdike Road, Mill Lane, and Kirton Holme Road within 400 m of the indicative zone for underground cable assets and the indicative zone for construction compounds where views are unrestricted by
•	Residential receptors along			vegetation.
	Silvertoft Lane, Fen Road and New Hammond Beck Road			Recreational users on the PRoW along New Hammond Beck and South Forty Foot Drain within 300 m where views are open and
•	Recreational users of the			particularly where the haul road overlaps with PRoW Fram/3/1 north of New Hammond Beck.
	PRoW along New Hammond Beck and South Forty Foot Drain			The indicative zone for construction compound to the south of the A52 Swineshead Road would be a noticeable element within
•	Visitors / tourists along the			views from nearby properties with open views, particularly along the B1192 Holmes Road and the A52.
	railway (Grantham to Skegness) and to Boston Aerodrome			There would likely be negligible loss of hedgerow or roadside vegetation throughout this length due to trenchless crossings.
•	Recreational users of the Black Sluice Navigation (South Forty Foot Drain).			
	ton End / Kirton Meeres (VP29, 30, VP31):  Residential receptors on Malmsgate Lane, Washdike	Medium	High	Residents of properties along the B1391 Donington Road and B1192 Holmes Lane within 400 m of the indicative zone for underground cable assets and the indicative zone for construction compounds where views are unrestricted by vegetation.
	B1391 Donington Road Residents of properti	Residents of properties along Malmsgate Lane, Washdike Road, Mill Lane, and Kirton Holme Road within 400 m of the indicative zone for underground cable assets and the indicative zone for		

Receptor Location		Sensitivity Criteria:		Significant Effect - Construction
		View value	Susceptibility	
•	Residential receptors on Kirton Holme Road, Mill Lane and the B1192 Holmes Lane			construction compounds where views are unrestricted by vegetation.  Residents of properties along Cherry Holt Lane and Fishmere
•	Residential receptors in Kirton End and along Dances Bank, Green Lane, Forefen Lane, Fen Road, and Multon Ings			End Road, where construction activity along the indicative zone for underground cable assets would pass within 300 m of properties, with the indicative zone for construction compounds an additional component of view.
	Lane			Recreational users on non-adopted footpaths (Little Side Road,
•	Recreational receptors on Little Side Road, Green Lane, and Malmsgate Lane (non- adopted footpaths)			Green Lane and Malmsgate Lane) within 300 m where sequential views are open and particularly where the indicative zone for underground cable assets crosses the footpaths via open trenching (Green Lane and Malmsgate Lane), as well as visibility of the the indicative zone for construction compounds situated
•	Recreational users of the PRoW with Kirton End			south of the B1391.  There would likely be loss of hedgerow or roadside vegetation throughout this length at the B1391 Donington Road, B1192 Holmes Lane and Kirton Holme Road.
Fish	nmere (VP32):	Medium	High	Residents of properties along the B1397 within 300 m of the
•	Residential receptors along B1397 Boston Road and Roper's Bridge Lane			indicative zone for underground cable assets, which would be readily or highly noticeable in views and along Roper's Bridge Lane within 400 m of the indicative zone for construction compounds where views are unrestricted by vegetation.
•	Residential receptors on Cherry Holt Lane and Fishmere End Road			Residents of properties along Cherry Holt Lane and Fishmere End Road where construction activity along the indicative zone for underground cable assets would pass within 300 m and the
•	Residential receptors along Rainwall's Lane, Meeres Lane, and Washdike Road			indicative zone for construction compounds would be visible readily noticeable component of views.  There would likely be negligible loss of hedgerow or roadside vegetation throughout this length.

Red	ceptor Location	Sensitivity C	riteria:	Significant Effect - Construction
		View value Susceptibility		
Sut	tterton (VP33): Residential receptors along Eley's Lane and Green Lane		Residents of properties along Eley's Lane where construction activity along the indicative zone for underground cable assets would pass within 400 m and the indicative zone for construction compounds along the A16 / Eley's Lane would be visible within	
•	Residential receptors within Sutterton			500 m.
•	Residential receptors along Church Lane, Red Barn Lane and Archer's Lane			Residents of properties along Green Lane where construction activity along the indicative zone for underground cable assets would pass within 400 m and the indicative zone for construction compounds along the A17 or along Eley's Road would be noticeable component of views.
•	Recreational users of the Cross Britain Way and connecting PRoW			Users of the Cross Britain Way and associated PRoW, which would cross the indicative zone for underground cable assets and pass within 50 m of the indicative zone for construction
<ul> <li>Recreational users of the PRoW connecting the A16 to Church Lane and those within</li> </ul>			compounds, as well as the PRoW where views are filtered at Church Lane. These elements would be readily or highly noticeable in sequential views.	
	and on the edges of Sutterton		The indicative zone for construction compounds to the south of the A17 Station Road would be a noticeable element within views from nearby properties, particularly along Waste Green Lane and the A17. There would likely be limited loss of hedgerow or roadside vegetation at Green Lane.	
Alg	arkirk (VP34):	Medium	High	Residents of properties along the A17 Station Road, Waste
•	Residential receptors along the A17 Station Road			Green Lane, and Cowham's Lane where construction activity along the indicative zone for underground cable assets would pass within 400 m and the indicative zone for construction
•	Residential receptors along Cowham's Lane, Waste Green Lane, Washdike Road, and Workhouse Lane.			compounds along the A17 would be visible as a noticeable component of views.  Residents of properties along Washdike Road (which would be used as a haul road) and Workhouse Lane where construction activity along the indicative zone for underground cable assets

Receptor Location	Sensitivity Criteria:		Significant Effect - Construction
	View value Susceptibility		
Residential receptors along     Crossgate Lane, Mill Lane,     Whitecross Gate, Marsh Lane,			would pass within 400 m, with the indicative zone for construction compounds along the A17 or along Eley's Road forming a noticeable component of views.
<ul> <li>Pitcher Row Lane</li> <li>Recreational users of the PRoW north of Fosdyke, the PRoW connecting Pitcher Row</li> </ul>			The indicative zone for construction compounds to the south of the A17 Station Road would be a noticeable element within views from nearby properties, particularly along Waste Green Lane and the A17.
Lane and Station Road, and the Prow between Washdike Road and the A16.			There would likely be negligible loss of hedgerow or roadside vegetation throughout this length.
<ul> <li>Fosdyke / Fosdyke Bridge (VP35):</li> <li>Residential receptors along the A17 Station Road / Moulton Washway, Smeeton's Lane, and Bram Lea.</li> </ul>	Medium	High	Residents of properties along the A17 Station Road / Moulton Washway, Smeeton's Lane, and Bram Lea, where construction activity along the indicative zone for underground cable assets would pass within 400 m, including the haul roads where vehicular movement would pass in close proximity (up to 200 m).
Residential receptors within Fosdyke / Fosdyke Bridge			Recreational users of the Macmillan Way and of the River Welland, with open sequential views within 75-200 m of the indicative cable route and overlapped by haul roads.
<ul> <li>Users of NCN 1 on A17         Moulton Washway and Wash         Road     </li> </ul>			There would likely be some loss of field boundary vegetation south of the River Welland.
<ul> <li>Recreational users of PRoW, including the Macmillan Way and South Bank, and between Fosdyke and Algarkirk Marsh</li> </ul>			
<ul> <li>Recreational users of the River Welland, including Fosdyke Yacht Haven</li> </ul>			

Receptor Location	Sensitivity C	riteria:	Significant Effect - Construction
	View value	Susceptibility	
Landscape Section 7: Moulton Sea	a's End – Foul	Anchor	
<ul> <li>Moulton Sea's End (VP36):</li> <li>Residential receptors along the B1357 Common Road and A17 Washway Road, between Moulton Marsh and Moulton Sea's End.</li> <li>Residential receptors at Moulton Sea's End</li> </ul>	Medium	High	Residents of properties along the B1357 Common Road, where construction activity along the indicative zone for underground cable assets would pass within 200-300 m and which would be readily or highly noticeable in views.  Residents of properties along the A17 Washway Road where the indicative zone for underground cable assets and construction activity may be visible across a wide field of view, at 600-800 m. The indicative zone for construction compounds to either side of
<ul> <li>Residential receptors along Carrington Road</li> </ul>			the A17 Washway Road at Moulton Common would be noticeable elements within views from nearby properties. There would likely be some loss of hedgerow or roadside vegetation
<ul> <li>Recreational users of PRoW at Bank House Farm and east of Moulton Sea's End.</li> </ul>			alongside and in the vicinity of the B1357 Common Road and A17 Washway Road.
Holbeach Clough (VP37):     Residential receptors in Saracen's Head, Holbeach Clough, Little Common, Holbeach Bank	Medium	High (Medium for hotel users)	Residents of properties along Little Common Lane, Sluice Road and Middle Marsh Road, where construction activity along the indicative zone for underground cable assets would pass within 200-300 m and which would be readily or highly noticeable in views.
<ul> <li>Residential receptors along Sluice Road and Marsh Road</li> </ul>			Hotel users and nearby residents along Holbeach River, where construction activity would be evident although partially filtered by vegetation.
<ul> <li>Users of NCN 1 on Marsh Road</li> </ul>			Residents with open northward views from Holbeach Clough, Holbeach Bank and along Roman Bank, where construction
<ul> <li>Users of Whaplode Manor Hotel</li> </ul>			activity along the indicative zone for underground cable assets would be widely visible at a distance of approximately 500 m.

Receptor Location	Sensitivity Cri	teria:	Significant Effect - Construction	
	View value	Susceptibility		
			There would be no views towards the indicative zone for construction compounds, and minor loss of hedgerow or roadside vegetation at Middle Marsh Road.	
<ul> <li>Holbeach Marsh (VP38, VP39):</li> <li>Residential receptors along rural lanes (Peartree House Road, Hurn Bank, Hurn Road)</li> </ul>	Medium	High (Medium for golf club users)	Residents of properties along Roman Bank and Hurn Bank, where construction activity along the indicative zone for underground cable assets would pass within 200-300 m and which would be readily or highly noticeable in views.	
<ul> <li>Residents of Holbeach Hurn and properties along Hurn Road west of Hovenden Golf Club</li> </ul>				The indicative zone for construction compounds near Peartree House Road would form a noticeable component of views from earby properties. A second indicative zone for construction ompounds adjacent to Hurn Road would be a distant aspect of iews for residents west of Hovenden Golf Course. Vegetation
Users of NCN 1 on Peartree     House Road			loss would be restricted to some lengths of managed hedgerow and boundary vegetation in the vicinity of Coney Garth House between Peartree House Road and New Cottages, which would represent a small degree of change within some views.	
Holbeach - Fleet Hargate (VP40, VP41):	Medium although	High	Residents of properties along Fleet Road and on the A17 Washway Road, where construction activity along the indicative	
Residential receptors on the eastern fringe of Holbeach	aesthetic and perceptual		zone for underground cable assets would pass within 200-300 m and which would be readily or highly noticeable in views.	
<ul> <li>Residential receptors at Fleet Hargate and Fleet</li> </ul>	qualities are lowered by the presence of retail buildings along the A17 road corridor.		The indicative zone for construction compounds alongside the A17 Washway Road would also form a component of views from properties on Fleet Road. There is likely to be minor loss of	
<ul> <li>Residential receptors of connecting roads between Holbeach and Fleet Hargate (A17 Washway Road, B1515 Fleet Road, Haycroft Lane, Hazelwood Lane)</li> </ul>			hedgerow or roadside vegetation alongside the B1515 Fleet Road.	

Receptor Location	Sensitivity Cri	teria:	Significant Effect - Construction
	View value	Susceptibility	
<ul> <li>Fleet Fen (VP41, VP42, VP43):</li> <li>Residential receptors along rural lanes southwest of Fleet Hargate and Fleet (including Haycroft Lane, Hazelwood Lane, Ball's Lane, Ben's Gate which cross the route of the indicative zone for underground cable assets).</li> <li>Users of NCN 1 on Hazelwood Lane</li> </ul>	Medium (although aesthetic and perceptual qualities are lowered by the presence of pylons)	High	Residents along Haycroft Lane, Hazelwood Lane, Ball's Lane and Ben's Gate, where construction activity along the indicative zone for underground cable assets would pass within 200-300 m and which would be readily or highly noticeable in views.  Residents along Ben's Gate Road and west of Fleet, with open unrestricted views within 500 m of the indicative zone for underground cable assets.  There would be no views towards the indicative zone for construction compounds, and with negligible loss of hedgerow or roadside vegetation throughout this length.
<ul> <li>Gedney Fen (VP44, VP45):</li> <li>Residential receptors along rural lanes between Delph Bank and South Holland Main Drain (Bullock's Short Gate, Moorswood Gate and B1390 St James Road).</li> <li>Recreational users of PRoW along South Holland Drain, Delph Bank and Gowts Lane.</li> </ul>	Medium (although aesthetic and perceptual qualities are lowered by the presence of pylons)	High	Residents along Bullock's Short Gate, Moorswood Gate and B1390 St James Road, where construction activity along the indicative zone for underground cable assets would pass within 200-300 m. The indicative zone for construction compounds may also form a component of views for some properties on the B1390 St James Road. Vegetation loss is likely to be restricted to some lengths of field boundary hedgerow near South Holland Drain which would not be readily noticeable in views.  Recreational users of the PRoW along Delph Bank within 200-300 m of the indicative zone for underground cable assets, which would be readily or highly noticeable to footpath users sequentially across a wide field of view.
<ul> <li>Tydd St Mary (VP46, VP47):</li> <li>Residential receptors to the north of Tydd St Mary, along the B1165 Draw Dyke to the west and along Common Lane</li> </ul>	Medium (although aesthetic and perceptual qualities are lowered by the	High	Residential receptors along the northern fringe of the village, towards The Grange (Common Lane), and from properties along Cross Gate and Greendike Lane, where views are unrestricted and due to construction activity along the indicative zone for underground cable assets passing within 200-300 m, which would be readily or highly noticeable in views.

Rec	eptor Location	Sensitivity Cri	teria:	Significant Effect - Construction
		View value	Susceptibility	
	towards The Grange to the east.	presence of pylons)	oylons)  A17 would be evident, although not promi  Vegetation loss would be restricted to lenge  trees along Cross Gate and Greendike La	The indicative zone for construction compounds adjacent to the A17 would be evident, although not prominent in views.
•	Residential receptors on rural lanes north of the village (Cross Gate and Greendike Lane)			trees along Cross Gate and Greendike Lane, which would be evident and represent a small degree of change within some
•	Users of NCN 1 on Greendike Lane			
_	d Gote and Foul Anchor 48, VP49):		Residential receptors to the northern fringes of Tydd Gate and Foul Anchor, where views are unrestricted and due to construction activity along the indicative zone for underground cable assets passing within 200-300 m, which would be readily o	
•	Residential receptors on the fringes of both villages aesthetic and			
•	Recreational users of the Nene Way	perceptual qualities are lowered by the presence of pylons)		highly noticeable in views.  Recreational users of the Nene Way crossing the indicative cable route between Tydd Gate and Foul Anchor, which would be readily or highly noticeable in views for footpath users sequentially across a wide field of view.
Lan	dscape Section 8: Foul Anchor	- Walpole (ind	icative zone fo	r converter stations and indicative Walpole B Substation)
	I Anchor, Tydd Gote and Four es (VP49, VP50):	Medium (although	High	Residential and recreational receptors with open views towards each of the indicative zone for converter stations for Options A, C
•	Residential receptors at Foul Anchor.	aesthetic and perceptual		and D, due to the visibility of the indicative converter station siting as skyline features during construction and, for Option D in particular, the proximity of both converter stations near
•	Residential receptors along the A1101 Sutton Road, between Newton-in-the-Isle and Tydd Gote	qualities are lowered by the presence of pylons)		Ingleborough village.  Residential and recreational receptors within 500 m of the indicative zone for underground cable assets crossing of River Nene north of the North Level Main, where the indicative zone for

Receptor Location	Sensitivity Cri	teria:	Significant Effect - Construction	
	View value Susceptibili		y	
Recreational users of PRoW connecting Four Gotes with Newton-in-the Isle and with			construction compounds may also be noticeable within open views.	
Foul Anchor			Residential and recreational receptors within 500 m (potentially up to 1 km) of the indicative zone for cable assets between Tydd Gate and Foul Anchor.	
River Nene (VP49 , VP52)  Recreational users of the River Nene and the Nene Way between Walton Dam and Foul Anchor	aesthetic and	High	Recreational receptors with open views towards each of the indicative zone for converter stations for Options C and D, due to the visibility of the converter stations as skyline features and, for Option D in particular the proximity of the indicative zone for converter stations west of Ingleborough village.  Recreational receptors within 500 m (potentially up to 1 km) of	
			the indicative zone for underground cable assets of River Nene north of the North Level Main or the indicative zone for underground cable assets between Tydd Gate and Foul Anchor.	
<ul> <li>Walpole Marsh (VP53):</li> <li>Residential receptors within Walpole Marsh village and along connecting roads</li> </ul>	Medium (although aesthetic and perceptual		Residential and recreational receptors with open views towards each of the indicative zone for converter stations for Options A, B, C and D, due to the visibility of the indicative converter station siting as skyline features during construction.	
(Gunthorpe Road, French's Road and Marsh Road).	qualities are lowered by the presence of		Residential and recreational receptors to the western fringe of Walpole Marsh with open views towards the indicative zone for	
<ul> <li>Recreational users of PRoW connecting with the River Nene.</li> </ul>	pylons)		underground cable assets crossing of River Nene north of the North Level Main, where the indicative zone for construction compounds may also be noticeable within open views.	
Ingleborough (VP54, VP55, VP56):  Residential receptors within Ingleborough and along Mill Road between West Walton and Walpole Bank.	Medium (although aesthetic and perceptual qualities are	High	Residential and recreational receptors with open views towards each of the indicative zone for converter stations for Options A, B, C and D due to the visibility of the indicative converter station siting as skyline features during construction and specifically for Options A, C and D due to the proximity of construction activity,	

Rec	eptor Location	Sensitivity Cri	iteria:	Significant Effect - Construction
		View value	Susceptibility	
•	Recreational users of the Jubilee Way and connecting PRoW.	lowered by the presence of pylons)		in particular that of the indicative zone for converter stations sited near Ingleborough village for Option D.  Residential and recreational receptors with unrestricted viewstowards construction activity along the indicative zone for underground cable assets (north of Ingleborough for Option C and south of Ingleborough for Option D) passing within 200-300 m, which would be readily or highly noticeable in views.
Wes	Residential receptors to the north of the village and users of amenities including St Marys Church and Marshland High School  Cyclists using NCN1 through West Walton	Medium (although aesthetic and perceptual qualities are lowered by the presence of pylons)	High	Residential and recreational receptors with open views towards each of the indicative zone for converter stations for Options A and D, due to the visibility of construction activity for the indicative converter station siting east of Ingleborough and its visibility as a skyline feature during construction.  Users of footpaths north of West Walton with unrestricted views towards construction activity along the indicative zone for underground cable assets (Option C and south of Ingleborough
•	Recreational users of the Jubilee Way and connecting PRoW.			for Option D) passing within 200-300 m, which would be readily or highly noticeable in views.
Wal	ton Highway (VP62): Residential receptors to the north of the village along Salts Road, Lynn Road and School Road; users of amenities including Walton Highway Village Club and Jasmine Nursery.	Medium (although aesthetic and perceptual qualities are lowered by the presence of pylons)	High	Residential and recreational receptors on the northernmost fringes of the village with open views towards construction activity in relation to indicative Walpole B Substation, works to the existing 400 kV overhead line, and the indicative zone for underground cable assets.

Receptor Location		Sensitivity Criteria:		Significant Effect - Construction
		View value	Susceptibility	
•	Recreational users of the Jubilee Way and connecting PRoW.			
•	Cyclists using NCN1 through Walton Highway			
	est Drove North, Faulkner use (VP60):	Medium (although	High	Residential and recreational receptors on the easternmost fringes of Walton Highway with open views towards:
•	Residential receptors towards the southern limit of West Drove North, east of Walton Highway and on Lynn Road towards the A47.	aesthetic and perceptual qualities are lowered by the presence of		<ul> <li>Prominent construction activity in relation to indicative Walpole B Substation and works to the existing 400 kV overhead line.</li> <li>Construction activity in relation to the easternmost indicative zone for converter stations (West Drove Road)</li> </ul>
•	Recreational users of Stratton Farm Camp Site	pylons)		for Options A, B and D.
•	Recreational users of the Jubilee Way and connecting PRoW.			
	st Drove North, Thorn Moor Id (VP59):	Medium (although	High	Residential and recreational receptors with open views towards: - Prominent construction activity in relation to the
•	Residential receptors along West Drove North in the vicinity of Thorn Moor Field between Walton Highway and Walpole St Peter.	aesthetic and perceptual qualities are lowered by the presence of		easternmost indicative zone for converter stations (West Drove Road) for Options A, B and C, where the indicative converter station siting, the indicative cable route and the indicative zone construction compounds would form major elements within views.
•	Recreational users of the Jubilee Way and connecting PRoW.	pylons)		<ul> <li>Construction activity in relation to indicative Walpole B Substation and works to the existing 400 kV overhead line.</li> </ul>

Receptor Location		Sensitivity Criteria:		Significant Effect - Construction	
		View value	Susceptibility		
				<ul> <li>More distant construction activity in relation to the indicative zone for converter stations for Option D (locations to the east and west of Ingleborough).</li> </ul>	
Wal	pole St Peter (VP57):	Medium	High	Residential receptors with open views towards:	
•	Residential receptors to the south of the village around Folgate Lane, West Drove North, Walnut Road and Mill Road	(although aesthetic and perceptual qualities are lowered by the presence of pylons)		<ul> <li>each of the indicative zone for converter stations for Options A, B, C and D due to the visibility of the indicative converter station siting as skyline features during construction, and in particular for Option B due to the closer proximity of construction activity in comparison with other options.</li> </ul>	
				<ul> <li>Construction activity in relation to indicative Walpole B Substation and works to the existing 400 kV overhead line.</li> </ul>	
Mill	Road, Church End (VP58):	Medium	High	Residential receptors with open views towards:	
•	Residential receptors along Mill Road, between Walpole St Peter and Walpole Highway.	perceptual		<ul> <li>each of the indicative zone for converter stations for Options A, B, C and D due to the visibility of the indicative converter station siting as skyline features during construction; in</li> </ul>	
•	Users of local PRoW at Cobblers Farm and Green Lane	qualities are lowered by the presence of pylons)		particular for Option B due to the closer proximity of construction activity in comparison with other options (both converter stations sited at West Drove North), less so for Option D due to the more distant siting of the converter stations near Ingleborough.	
				Construction activity in relation to indicative Walpole B Substation and the works to the existing 400 kV overhead line.	

**Table 8-14 - Preliminary Summary of Visual Effects - Operation** 

Receptor Location	Sensitivity Criteria:		Significant Effect – Operation (Years 1 and 15)
	View value	Susceptibility	•
Landscape Section 6: Hubbert's Bridge	- Moulton Sea's Er	nd	
Kirton End / Kirton Meeres (VP29, VP30, VP31):  Residential receptors on Malmsgate Lane, Washdike Road, Cutherbert's Lane and the B1391 Donington Road	Medium	High	Potential effects at Year 1 for residential receptors where cleared hedgerow / roadside vegetation at the B1391 Donington Road, B1192 Holmes Lane and Kirton Holme Road may be distinctly noticeable within views.  The establishment of reinstated hedges and
<ul> <li>Residential receptors on Kirton Holme Road, Mill Lane and the B1192 Holmes Lane</li> </ul>			vegetation by year 15 would reduce the magnitude of change to negligible.
<ul> <li>Residential receptors in Kirton End and along Dances Bank, Green Lane, Forefen Lane, Fen Road, and Multon Ings Lane</li> </ul>			
<ul> <li>Recreational receptors on Little Side Road, Green Lane, and Malmsgate Lane (non-adopted footpaths)</li> </ul>			
<ul> <li>Recreational users of the PRoW with Kirton End</li> </ul>			

Landscape Section 8: Foul Anchor – Walpole (indicative zone for sonverter stations and indicative Walpole B Substation)

Receptor Location	Sensitivity Criteria:		Significant Effect – Operation (Years 1 and 15)
	View value	Susceptibility	Residential and recreational receptors with open views towards each of the indicative zone for converter stations for Options A, C and D, where the indicative converter station siting would be visible as built forms against the skyline for residents along the A1101, at Foul Anchor and for footpath users. They would be noticeable features in a landscape already heavily influenced by overhead power lines. Option D (as both indicative zones for converter stations are located near Ingleborough village) would be the most noticeable of the options from this location due to their closer proximity.
<ul><li>Gotes (VP49, VP50):</li><li>Residential receptors at Foul Anchor.</li></ul>	Medium (although aesthetic and perceptual qualities are lowered by the presence of pylons)	High	
Recreational users of the River     Nene and the Nene Way between     Walten Dam and Foul Apphar	Medium (although aesthetic and perceptual qualities are lowered by the presence of pylons)	High	Recreational receptors with open views towards each of the indicative zone for converter stations for Options C and D, where both of the indicative converter station sitings would be visible against the skyline from sequential views along the footpath. At approx. 250 m, the westernmost indicative zone for converter stations (west of Ingleborough) in each option would be locally prominent in views from the footpath at its closest approach, forming an additional detracting element in views already influenced by existing industrial works sites and high voltage power lines.
Residential receptors within     Walpole Marsh village and along     connecting roads (Guntherne Boad)	Medium (although aesthetic and perceptual qualities are lowered by the presence of pylons)	High	Residential and recreational receptors with open views towards each of the indicative zone for converter stations for Options A, B, C and D, where the indicative converter station siting would be fully or partially visible as skyline features to the south and within a wide field of view for residents of properties

Receptor Location		Sensitivity Criteria:		Significant Effect – Operation (Years 1 and 15)
		View value	Susceptibility	1
•	Recreational users of PRoW connecting with the River Nene.			on French's Road and Marsh Road. The buildings would represent additional energy related infrastructure in a landscape already heavily influenced by overhead power lines and an existing substation. Oblique views from properties along The Marsh would be partially screened by vegetation and buildings on French's Lane.
Ingl	leborough (VP54, VP55, VP56): Residential receptors within Ingleborough and along Mill Road between West Walton and Walpole Bank. Recreational users of the Jubilee Way and connecting PRoW.	Medium (although aesthetic and perceptual qualities are lowered by the presence of pylons)	High	Residential and recreational receptors with open views towards each of the indicative zone for converter stations for Options A, C and D due to the proximity and the relative prominence of both indicative converter station sitings in relation to Ingleborough. Option D would have the most potential for significant effect on local sensitive receptors, where both indicative zones for converter stations would be sited to the east and west of the village, potentially affecting residents on all sides of the village and for properties north and south along Mill Road and Ingleborough Farm.  Residential and recreational receptors with open views towards the indicative zone for converter
				stations in Option B (both sited at West Drove North) where the structures would be visible as skyline features, at greater distance than for the other options.
We	st Walton (VP 56):  Residential receptors to the north of the village and users of amenities including St Marys Church and Marshland High School	Medium (although aesthetic and perceptual qualities are lowered by the presence of pylons)	High	Residential and recreational receptors with open views towards each of the indicative zone for converter stations for Options A and D, due primarily to the visibility of the indicative converter station siting to the east of Ingleborough and its visibility as a

Receptor Location		Sensitivity Criteria:		Significant Effect – Operation (Years 1 and 15)
		View value	Susceptibility	
•	Cyclists using NCN1 through West Walton			skyline feature. Indicative Walpole B Substation would be well screened by existing vegetation.
Wal	Iton Highway (VP62): Residential receptors to the north of the village along Salts Road, Lynn Road and School Road; users of amenities including Walton Highway Village Club and Jasmine Nursery.	Medium (although aesthetic and perceptual qualities are lowered by the presence of pylons)	High	Residential and recreational receptors on the northernmost fringes of Walton Highway, where the indicative Walpole B Substation and the works to the existing 400 kV overhead line would be visible from properties on Salts Road and users of footpaths with open views or with views fragmented by roadside and nearby commercial orchard vegetation.
•	Recreational users of the Jubilee Way and connecting PRoW.			The establishment of landscape mitigation planting would, on maturing, partially screen the substation extents at ground level, although it would remain as a skyline component of view to nearby residents and footpath users. The indicative zone for converter stations for all Options A-D would be predominantly screened by the framework of existing vegetation to the north of the village.
•	Cyclists using NCR1 through Walton Highway			
	st Drove North, Faulkner House (60):	Medium (although aesthetic and	High	Residential and recreational receptors on the easternmost fringes of Walton Highway with open
•	Residential receptors towards the southern limit of West Drove North, east of Walton Highway and on Lynn Road towards the A47.	perceptual qualities are lowered by the presence of pylons)		views towards the indicative Walpole B Substation and the works to the existing 400 kV overhead line, and the easternmost indicative zone for converter stations (West Drove Road) for Options A, B and D.
•	Recreational users of Stratton Farm Camp Site			The indicative Walpole B Substation would be widely visible from properties located on West Drove North and with open views west. It would occupy a large portion of the view, visible beyond existing field boundary vegetation and against the skyline in the

Receptor Location	Sensitivity Criteria:		Significant Effect – Operation (Years 1 and 15)
	View value	Susceptibility	1
Recreational users of the Jubilee Way and connecting PRoW.			context of existing high voltage power lines. The easternmost indicative zone for converter stations, situated further north along West Drove North would also be visible as a component of the view against the skyline. Residents of Stratton Farm, Willow Farm and campsite users, although partially screened by matur vegetation, would have prominent views of both construction areas. Landscape mitigation planting in relation to the substation would, on maturing, reduce the relative exposure of the converter station sites at ground level, although it would remain visible as a skyline feature to residents, footpath users and campsite users.
<ul> <li>West Drove North, Thorn Moor Field (VP 59):</li> <li>Residential receptors along West Drove North in the vicinity of Thorn Moor Field between Walton Highway and Walpole St Peter.</li> </ul>	Medium (although aesthetic and perceptual qualities are lowered by the presence of pylons)	High	Residential and recreational receptors with open views towards the indicative zone for converter stations (at West Drove Road) for Options A, B and where the indicative converter station siting would form the dominant aspect of views in the near to middle distance and against the skyline, with
Recreational users of the Jubilee Way and connecting PRoW.			indicative Walpole B Substation and the works to the existing 400 kV overhead line beyond, partially screened by the indicative converter station siting itself. The above-ground elements of EGL 3 and EGL 4 would, in combination, add to the prominence of energy infrastructure already present within views. The indicative zone for converter stations associated with Option D (locations to the east and west of Ingleborough) would be more distant skyline components of wider-reaching views.
Walpole St Peter (VP57):  National Grid   May 2025   Preliminary Environmenta	Medium (although aesthetic and	High	Residential receptors on the southern fringes of Walpole St Peter with open views towards the

ceptor Location	Sensitivity Criteria:		Significant Effect – Operation (Years 1 and 15)
	View value	Susceptibility	
Residential receptors to the south of the village around Folgate Lane, West Drove North, Walnut Road and Mill Road	f perceptual qualities are lowered by the presence of pylons)		indicative zone for converter stations for Options A, B, C and D; in particular for Option B due to the closer location of the indicative converter station siting (both sited at West Drove North). The converter station structures would form a noticeable component of open views in the middle distance and against the skyline, where high voltage power lines already define the majority of open views to the south and southwest of the village. The indicative Walpole B Substation would be visible at distance, although in the instance of the indicative zone for converter stations for Options A and C would be partially screened by the converter stations themselves.
Road, Church End (VP58): Residential receptors along Mill Road, between Walpole St Peter and Walpole Highway. Users of local PRoW at Cobblers Farm and Green Lane	Medium (although aesthetic and perceptual qualities are lowered by the presence of pylons)	High	Residential receptors with open views towards each of the indicative zone for converter stations for Options A, B, C and D, where the indicative converter station siting would form a noticeable skyline component of views from properties along Mill Road (in particular for Option B, due to the closer distance of the indicative converter station siting at West Drove North and less so for Option D, due to the more distant siting of the converter stations near Ingleborough). At approx. 1.5 km, the indicative Walpole B Substation would be visible within the context of views, but not as a feature on the skyline. The appearance of the indicative zone for converter stations and the indicative Walpole B Substation would in combination, add to the presence of energy related infrastructure already evident within views.  Landscape mitigation planting surrounding the
	Residential receptors to the south of the village around Folgate Lane, West Drove North, Walnut Road and Mill Road  Road, Church End (VP58): Residential receptors along Mill Road, between Walpole St Peter and Walpole Highway. Users of local PRoW at Cobblers	Residential receptors to the south of the village around Folgate Lane, West Drove North, Walnut Road and Mill Road  Road, Church End (VP58): Residential receptors along Mill Road, between Walpole St Peter and Walpole Highway. Users of local PRoW at Cobblers  Perceptual qualities are lowered by the presence of pylons)  Medium (although aesthetic and perceptual qualities are lowered by the presence of pylons)	Residential receptors to the south of the village around Folgate Lane, West Drove North, Walnut Road and Mill Road  Road, Church End (VP58): Residential receptors along Mill Road, between Walpole St Peter and Walpole Highway. Users of local PRoW at Cobblers  Perceptual qualities are lowered by the presence of pylons)  Medium (although aesthetic and perceptual qualities are lowered by the presence of pylons)

Receptor Location	Sensitivity Criteria:		Significant Effect – Operation (Years 1 and 15)
	View value	Susceptibility	
			reduce its relative exposure at ground level at distance. The indicative converter station siting would however remain visible as skyline features to residents and footpath users.

# 8.12 Further Work to be Undertaken

8.12.1 The information provided in this PEIR is preliminary, the final assessment of potential significant effects will be reported in the ES. This section describes the further work to be undertaken to support the Landscape and Visual assessment presented in the ES.

### Baseline

8.12.2 Field survey is ongoing and will inform the assessment provided in the ES. In addition to this, discussions with technical stakeholders including in relation to methodology, viewpoint identification and visualisation requirements will further inform the baseline for the assessment.

### **Assessment**

- 8.12.3 The preliminary Landscape and Visual assessments undertaken for the PEIR will be reviewed following stakeholder consultation feedback and through further design refinement. The following assessments will then either be updated or undertaken where they have not been undertaken for this PEIR:
  - The landscape assessment will be reviewed in the context of amended design information that will be produced for the ES stage.
  - A full visual effects assessment will be presented in the ES following the methodology set out (Volume 2, Part 2, Appendix 2.8.A: Landscape and Visual Assessment Methodology), informed by the preliminary assessment and through additional baseline data collection, consultation feedback and further design refinement including embedded environmental measures.
  - Night-time visual effects (during construction and at operation) will be assessed for the sensitive receptors identified as potentially affected.
  - Cumulative Assessment of Landscape and Visual Effects will be included at the ES Stage.
  - Combined Landscape and Visual effects (Intra Project effects will be assessed at the ES stage).
- 8.12.4 Where design information is currently limited, further assessment input is anticipated in relation to:
  - The selection of the final preferred siting location for each converter station (Options A - D as currently addressed in the preliminary assessment) and emerging design detail in respect of their architectural appearance; and
  - Potential works to install, operate and reinstate the River Nene Temporary Quay.

# **Further Environmental Measures**

8.12.5 Further consultation with relevant statutory consultees will be undertaken to define the scope and extent of the environmental measures set out in the assessment. If, following stakeholder consultation feedback, ongoing design refinement and continued assessment, it is identified that additional measures are required, then these will be detailed as part of the ES.

- 8.12.6 As described in the preliminary assessment, there is a potential for significant adverse landscape and visual effects due to impacts associated with the indicative Walpole B Substation and the converter stations, this being upon the Landscape Character of Terrington St. John LCA and on surrounding residential receptors including at West Walton, Walton Highway, Ingleborough and Walpole St Peter, and recreational receptors along the Nene Way Long Distance Path and local PRoWs (including the Jubilee Way local trail). Appropriate landscape mitigation measures will be incorporated through further design refinement, following the identification of the preferred siting locations.
- 8.12.7 Further and more detailed consideration of proposed environmental measures will be required in the vicinity of the landfall area at Anderby Creek, at Gunby Hall Grade II Registered Park and Garden and in the context of the Lincolnshire Wolds National Landscape, and location of the indicative zone for construction compounds.
- 8.12.8 Environmental measures will be proposed as part of the development of an integrated environmental measures strategy, with inputs from ecological and arboricultural surveys. They will be adopted as an embedded part of the English Onshore Scheme and therefore will be factored into the assessment presented in the ES.

# **Bibliography**

- Ref. 8.1: Gov.UK (2008) Section 42 of the Planning Act 2008 [online]. Available at: <a href="https://www.gov.uk/guidance/planning-act-2008-acceptance-stage-for-nationally-significant-infrastructure-projects">https://www.gov.uk/guidance/planning-act-2008-acceptance-stage-for-nationally-significant-infrastructure-projects</a> [Accessed 28 Jan. 2025].
- Ref. 8.2: Landscape Institute (2013). Guidelines for landscape and visual impact assessment (GLVIA). 3rd ed. London: Routledge. [online]. Available at: <a href="https://www.landscapeinstitute.org/technical/glvia3-panel/">https://www.landscapeinstitute.org/technical/glvia3-panel/</a> [Accessed 28 Jan. 2025].
- Ref. 8.3: Gov.UK (2014). An Approach to Landscape Character Assessment. [online] Available at: <a href="https://www.gov.uk/government/publications/landscape-character-assessments-identify-and-describe-landscape-types">https://www.gov.uk/government/publications/landscape-character-assessments-identify-and-describe-landscape-types</a> [Accessed 28 Jan. 2025].
- Ref. 8.4: Landscape Institute (2024). Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition (GLVIA 3). [online] Available at: <a href="https://www.landscapeinstitute.org/technical-resource/notes-and-clarifications-on-aspects-of-the-3rd-edition-guidelines-on-landscape-and-visual-impact-assessment-glvia3-litgn-2024-01/[Accessed 28 Jan. 2025].</a>
- Ref. 8.5: Landscape Institute (2021). Assessing landscape value outside national designations. [online] Available at: <a href="https://www.landscapeinstitute.org/publication/tgn-02-21-assessing-landscape-value-outside-national-designations/">https://www.landscapeinstitute.org/publication/tgn-02-21-assessing-landscape-value-outside-national-designations/</a> [Accessed 28 Jan. 2025].
- Ref. 8.6: Landscape Institute (2019). Visual Representation of Development Proposals. [online] Available at: <a href="https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/09/LI TGN-06-19 Visual Representation.pdf">https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/09/LI TGN-06-19 Visual Representation.pdf</a> [Accessed 28 Jan. 2025].
- Ref. 8.7: Landscape Institute (2017). Technical Guidance Note 01/17 Tranquillity An overview [online] Available at: <a href="https://www.landscapeinstitute.org/technical-resource/tranquillity/">https://www.landscapeinstitute.org/technical-resource/tranquillity/</a> [Accessed 31 March 2025]
- Ref 8.8: Landscape Institute (2020). Technical Guidance Note 04/20 Infrastructure [online] Available at: <a href="https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2018/01/LI-Infrastructure-TGN-FINAL-200924.pdf">https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2018/01/LI-Infrastructure-TGN-FINAL-200924.pdf</a> [Accessed 31 March 2025]
- Ref 8.9: Lincolnshire County Council (2011) Lincolnshire Historic Landscape Characterisation (HLC) [online] Available at: https://www.lincolnshire.gov.uk/historic-environment/historic-landscape-
- characterisation#:~:text=Historic%20Landscape%20Characterisation%20%28HLC%29%20was %20a%20project%20that,Countryside%20Service%20and%20all%20councils%20across%20G reater%20Lincolnshire. [Accessed 31 March 2025]
- Ref 8.10: South East Lincolnshire Councils Partnership (2003) Strategic Landscape Capacity Study for South Holland District Council [online] Available at:
- https://southeastlincslocalplan.org/media/24158/Strategic-Landscape-Capacity-Study-for-South-Holland-District-
- Council/pdf/Strategic Landscape Capacity Study for South Holland District Council.pdf?m= 1703961388580 [Accessed 31 March 2025]
- Ref 8.11: Ordanance Survey (2025) Digital 1:50,000 Scale Colour Raster mapping Terrain data at 5m resolution. Vectormap District boundary data [online]. Available at: https://www.ordnancesurvey.co.uk/products/50k-raster [Accessed 31 March 2025]
- Ref 8.12: Google Earth Pro, (2025) [online]. Available at: <a href="https://www.google.com/earth/about/versions/">https://www.google.com/earth/about/versions/</a> [Accessed 31 March 2025]

- Ref 8.13: Natural England (2025) National Landscape Character Arprofiles [online]. Available at:
- https://nationalcharacterareas.co.uk/#:~:text=This%20website%20contains%20interactive%20pr ofiles%20which%20describe%20each,in%20the%20landscape%2C%20not%20county%20or% 20district%20boundaries [Accessed 31 March 2025].
- Ref 8.14: Multi Agency Geographic Information for the Countryside (MAGIC) MAGIC interactive map (2025) [online]. Available at: <a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>. [Accessed 31 March 2025].
- Ref 8.15: Long Distance Walkers Association (2025) Long Distance Footpaths Baseline information on routes [online]. Available at: <a href="https://ldwa.org.uk/ldp/public/ldp-public\_home.php">https://ldwa.org.uk/ldp/public/ldp-public\_home.php</a> [Accessed 31 March 2025].
- Ref 8.16: Sustrans National Cycle Route (2025) [online]. Available at: <a href="https://www.sustrans.org.uk/find-a-route-on-the-national-cycle-network/?location=null&distance=null&routetype=null">https://www.sustrans.org.uk/find-a-route-on-the-national-cycle-network/?location=null&distance=null&routetype=null</a> [Accessed 31 March 2025].
- Ref 8.17: Lincolnshire County Council (2025) Public Rights of Way (PRoW) [online]. Available at: <a href="https://www.lincolnshire.gov.uk/coast-countryside/public-rights-way/2?documentId=129&categoryId=20101">https://www.lincolnshire.gov.uk/coast-countryside/public-rights-way/2?documentId=129&categoryId=20101</a> [Accessed 31 March 2025].
- Ref 8.18: Landscape East (2010) Landscape Character Type | Landscape East [online] Available at: <a href="http://landscape-east.org.uk/lcts">http://landscape-east.org.uk/lcts</a> listing [Accessed 28 Jan. 2025].
- Ref 8.19: Natural England (2010), East Midlands Region Landscape Character Assessment. [online] Available at: <a href="https://publications.naturalengland.org.uk/publication/5635681403535360">https://publications.naturalengland.org.uk/publication/5635681403535360</a> [Accessed 28 Jan. 2025].
- Ref 8.20: East Lindsey District Council (2009), East Lindsey District Landscape Character Assessment Final Report [online] Available at: <a href="https://www.e-lindsey.gov.uk/article/6163/Landscape-Character-Assessment">https://www.e-lindsey.gov.uk/article/6163/Landscape-Character-Assessment</a> [Accessed 28 Jan. 2025].
- Ref 8.21: Boston Borough Council (2009), Landscape Character Assessment of Boston Borough. [online] Available at: <a href="https://southeastlincslocalplan.org/article/23411/Environment">https://southeastlincslocalplan.org/article/23411/Environment</a> [Accessed 28 Jan. 2025].
- Ref 8.22: South Holland District Council (2003), Strategic Landscape Capacity Study for South Holland District Council [online] Available at: https://southeastlincslocalplan.org/article/23411/Environment [Accessed 28 Jan. 2025].
- Ref 8.23: King's Lynn and West Norfolk Borough Council (2007), King's Lynn and West Norfolk Borough Landscape Character Assessment [online] Available at: <a href="https://www.west-norfolk.gov.uk/downloads/download/77/landscape\_character\_assessment">https://www.west-norfolk.gov.uk/downloads/download/77/landscape\_character\_assessment</a> [Accessed 28 Jan. 2025].
- Ref 8.24: Fenland District Council (2022), Fenland Local Plan 2021 2040 [online] Available at: <a href="https://www.fenland.gov.uk/article/15170/Emerging-Local-Plan">https://www.fenland.gov.uk/article/15170/Emerging-Local-Plan</a> [Accessed 28 Jan. 2025].
- Ref 8.25: Gov.UK (2011) Historic Character of the County of Lincolnshire Character Zones [online] Available at: <a href="https://www.lincolnshire.gov.uk/historic-environment/historic-landscape-characterisation">https://www.lincolnshire.gov.uk/historic-environment/historic-landscape-characterisation</a> [Accessed 28 Jan. 2025].
- Ref 8.26: Lincolnshire County Council (2011) The Historic Character of Lincolnshire Report [online] Available at: <a href="https://lincolnshire.gov.uk/downloads/file/2205/the-historic-character-of-lincolnshire-pdfa">https://lincolnshire.gov.uk/downloads/file/2205/the-historic-character-of-lincolnshire-pdfa</a> [Accessed 31 March 2025].

- Ref 8.27: Lincolnshire Wolds Countryside Service (2018) Lincolnshire Wolds Area of Outstanding Natural Beauty Management Plan 2018-2023 [online] Available at: <a href="https://www.lincswolds.org.uk/our-work/management-plan">https://www.lincswolds.org.uk/our-work/management-plan</a> [Accessed 31 March 2025].
- Ref 8.28: Natural England (2025) National Character Area Profile 42 Lincolnshire Coast and Marshes [online] available at:
- https://publications.naturalengland.org.uk/publication/6596660822016000?category=587130 [Accessed 31 March 2025].
- Ref 8.29: Natural England (2025) National Character Area Profile 43 Lincolnshire Wolds [online]. Available at: <a href="https://publications.naturalengland.org.uk/publication/9965009">https://publications.naturalengland.org.uk/publication/9965009</a> [Accessed 31 March 2025].
- Ref 8.30: Natural England (2025) National Character Area Profile 44 Central Lincolnshire Vale [online] Available at: <a href="https://publications.naturalengland.org.uk/publication/5902941076586496">https://publications.naturalengland.org.uk/publication/5902941076586496</a> [Accessed 31 March 2025].
- Ref 8.31: Natural England (2025) National Character Area Profile 46 The Fens [online] Available at: <a href="https://publications.naturalengland.org.uk/publication/6229624">https://publications.naturalengland.org.uk/publication/6229624</a> [Accessed 31 March 2025].
- Ref 8.32: The Strategic Options Report and Corridor and Preliminary Routeing and Siting Study Report for the Eastern Green Link 3 and Eastern Green Link 4 Project. National Grid [online]. Available at <a href="https://www.nationalgrid.com/document/151391/download">https://www.nationalgrid.com/document/151391/download</a>[Accessed 23 January 2025].
- Ref. 8.33: Countryside Commission (2001). Area of Outstanding Natural Beauty: a guide for AONB partnership membership.
- Ref. 8.34: Institute of Environmental Management and Assessment (IEMA) (2004). Guidelines for Environmental Impact Assessment. Lincoln, UK: IEMA.

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