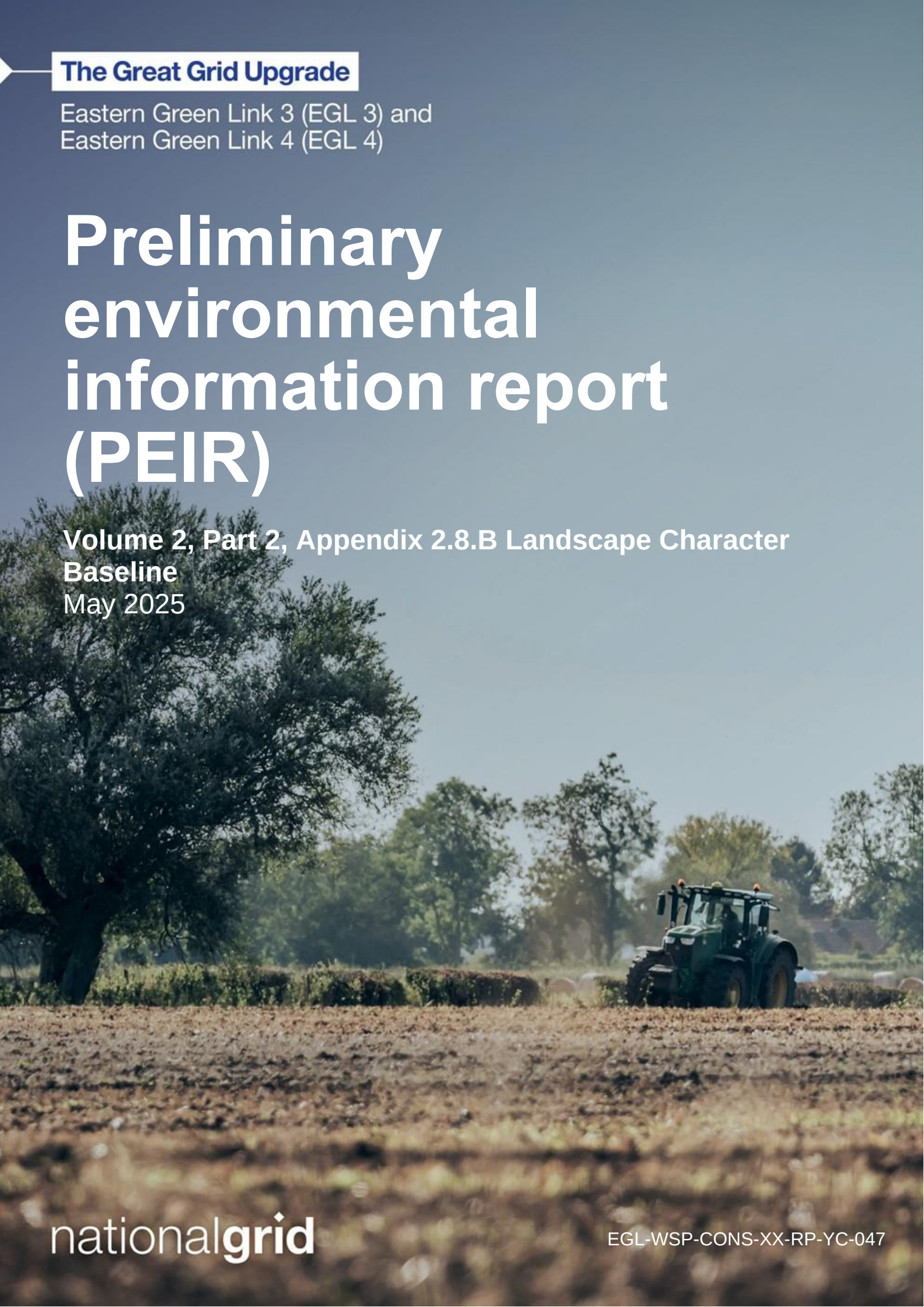
The Great Grid Upgrade

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

Preliminary environmental information report (PEIR)

Volume 2, Part 2, Appendix 2.8.B Landscape Character Baseline

May 2025



nationalgrid

EGL-WSP-CONS-XX-RP-YC-047

Contents

2.8.B. Landscape Character

2.8.B.1 Introduction

2.8.B.1.1 This Appendix presents the landscape character baseline alongside assessments of landscape receptors that have not been significantly affected by the Eastern Green Link 3 (EGL 3) and Eastern Green Link 4 (EGL 4) English Onshore Scheme. The assessment of landscape receptors that have been assessed as significant in any of the phases English Onshore Scheme has been included in the main report.

2.8.B.1.2 This Appendix should be read in conjunction with the following documents:

- **Volume 1, Part 2, Chapter 8 Landscape and Visual Amenity***;*
- **Volume 2, Part 2, Appendix 2.8.A: Landscape and Visual Methodology***;* and
- **Volume 2, Part 2, Appendix 2.8.C: Visual Baseline and Assessment**.

2.8.B.1.3 As recognised in **Volume 1, Part 1, Chapter 4: Description of the Projects**, a degree of flexibility has been retained within the draft Order Limits through the provision of several development zones. These include the indicative zone for underground cable assets which identifies the areas within which the permanent cable assets would be constructed, comprising the trench (or installation area) and the associated temporary working width which would be required for cable installation. The indicative zone for underground cable assets and the indicative cable route are shown in **Volume 3, Part 1, Figures 4-1 to 4-4 and 4-6.** Consideration has been given to the potential for effects to be of greater significance should any of the components of the English Onshore Scheme be moved within the development zone identified. The assumptions made regarding the use of flexibility for the assessment and any alternative assumptions are set out in **Volume 1, Part 2, Chapter 8 Landscape and Visual Amenity**.

2.8.B.1.4 This Appendix has been structured to present the landscape character baseline covering primarily published Landscape Character Assessments followed by the assessment of the effects on landscape character. Where the effects on landscape receptors have been assessed as significant, they have been referenced in the main **Volume 1, Part 2, Chapter 8 Landscape and Visual Amenity**, where also some landscape character baseline is presented. **Volume 3, Part 2, Figure 8-1** illustrates the National Character Areas and Landscape designations, whilst **Volume 3, Part 2, Figure 8-2** illustrates the Local Landscape Character Areas.

2.8.B.2 Landscape character baseline

National level - National Character Area (NCA) Profiles

Table 2.8.B-1 – National Character Area Profiles

NCA Profile	Key Landscape Characteristics
Lincolnshire Coast and Marshes NCA 42	• Consists of three distinctly different but interconnected regions; Middle Marsh to the west, Outmarsh to the east and the coast itself; • Dispersed settlement pattern throughout with nucleated patterns in areas of higher ground. Larger settlements are concentrated around coastal resorts. • Flat coastal plains to the east rising towards the west, with more undulating land at the foot of the Lincolnshire Wolds. • A complex series of natural and manmade rivers, streams, watercourses and ditches drain eastwards towards the sea. • Predominantly agricultural landscape in arable and pastoral land use, with traditional grazing marshes, a nationally threatened habitat, scattered throughout the NCA area. • Woodland and hedge cover is typically sparse but intensifies towards the west where the area borders the Lincolnshire Wolds. There are significant Ancient Woodlands within the NCA section of the Landscape Character Area (LCA). • Archaeologically, evidence of medieval villages, ridge and furrow, medieval or later industry.
Lincolnshire Wolds NCA 43	• Rolling hills with an escarpment to the north and west coupled with a predominantly agricultural landscape. • Mainly arable agricultural use with rectilinear pasture fields formed by clipped hawthorn hedgerows. • Limited woodland across the area, but clumps of beech, shelterbelts, and hedgerow trees are present throughout. In some of the south-west valleys, alder carr woodlands are widely present. • 62% of the area lies within the Lincolnshire Wolds and is characterised by its natural beauty, expansive views and tranquil atmosphere. • Springs and chalk streams are prevalent, and the headwaters of several rivers are found within the area. • Sparse settlement pattern, with scattered farmsteads, market towns and some small, nucleated villages. • Wide grass verges extending up to 20m run alongside some roads and historical tracks and provide a species rich linear habitat throughout.
Central Lincolnshire Vale NCA 44	• Characteristically broad, undulating, low-lying landscape with an imperceptible rise across the centre of the area. The scarp

NCA Profile	Key Landscape Characteristics
	of the adjacent Lincolnshire Wolds provides a striking boundary to the eastern side of the NCA. • Natural streams flowing from their sources in the adjacent Lincolnshire Wolds cross the landscape as they head towards the modified courses of the River Ancholme to the north and the River Witham to the south. • Predominantly arable farmland throughout, with pastoral fields found around villages. • Fields generally arranged in a regular pattern separated by hawthorn hedgerows. However, within the Ancholme Valley, rectilinear fields bounded by ditches and dykes are typical. • Woodland cover is a mixture of isolated field or hedge trees in the central and northern regions, whilst other regions feature boundary trees, conifer plantations, and greater densities of woodlands. • Sparsely populated, with a scattered nucleated settlement pattern and isolated farmsteads connected by predominantly minor roads. • Dispersed monastic sites and the nearby Lincoln Cathedral act as key landmarks and visual markers across the area.
Fens NCA 46	• Formed from four distinct areas: open coastal marshes, drained coastal marshes, settled inland fens, and open inland fens. • Expansive, flat, open, low-lying wetlands create extensive vistas, whilst large built structures dot the landscape, exhibiting a strong vertical visual influence throughout the area. • Rectilinear landscape pattern formed by open fields bounded by drains and rivers. • Predominantly arable use with cattle grazing along the banks and dykes found across the regions. • Settlement pattern focuses around the ‘geological islands’ with nucleated clusters on these raised areas, whilst elsewhere dispersed ribbon settlements follow the main arterial routes through the area. • Sparse woodland cover generally with isolated field trees, occasional shelterbelts and roadside avenues. • Rich archaeological and geological area with well-preserved historical remains and sites evidencing environmental changes.

Regional level – County Landscape Character Assessments

2.8.B.2.1 At the county scale, the English Onshore Scheme falls mainly within the administrative boundaries of Lincolnshire County Council. The southern end of the English Onshore Scheme encroaches into the administrative boundaries of Local Government Councils such as King's Lynn, West Norfolk, and Fenland District Council. However, there is no specific County Landscape Character Assessment available at the County level both within Lincolnshire and south of Lincolnshire.

2.8.B.2.2 However Natural England published East Midlands Region Landscape Character Assessments. The regional level of assessment adds a regional layer to the NCA Profiles identified by Natural England and provides a strategic context and framework for more detailed landscape assessments at the county, district and local scales. This assessment identifies Landscape Character Types (LCT's), which are generic and may occur in different localities throughout the region. They share broadly similar combinations of geology, topography, drainage patterns, vegetation, historic and current land uses and settlement patterns. The key attributes of these Landscape Character Types are listed in **Table 2.8.B-2** below.

Table 2.8.B-2 – Regional Character Area Profiles

Landscape Character Types	Key Landscape Characteristics
Coastal Saltmarshes and Mudflats (1A)	• Extensive, low-lying, dynamic landscape with wide panoramic views out to sea, obscured in some places by sea banks. • Generally inaccessible in The Wash with greater provision of access into areas of saltmarsh along the North Lincolnshire Coast. • Rich mosaic of saltmarsh plant communities alongside complex networks of brackish pools, tidal creeks and inlets. • No settlement within the area, and almost devoid of any build up. • Landscape formed by natural processes of deposition, inundation and ecological succession.
Coastal Dunes, Beach and Intertidal Sand Flats (1B)	• Dynamic landscape of sandy beaches, rolling dunes, saltmarshes and intertidal sand flats. • Tapestry of low level, fragile vegetation ranging from pioneer species on the shoreline to scrub and grassland communities on the dunes. • Settlement is evidenced through fencing, viewpoints and tracks with increased activity during summer months. • Complex landform linked to an array of natural processes with dynamic development in tandem with shoreline evolution.
Settled Fens and Marshes (2a)	• Flat, open and low-lying landscape throughout with a juxtaposition of character between the coastal seaside resorts and the expansive farmlands inland.

Landscape Character Types	Key Landscape Characteristics
	• Vast skies and wide featureless horizons provide panoramic views out to sea and inland towards the Lincolnshire Wolds. • Mixture of organic and geometric field patterns bordered predominantly by wet dykes, sea walls and canalised rivers, with few hedgerows, hedgerow trees and shelter belt plantation woodland. • Predominantly arable farming, with some pasture within smaller hedged fields within proximity to villages and along the sea banks. • Tree cover is overall quite sparse, however there is increased woodland cover on the fringes of the Lincolnshire Wolds. • Settlement pattern matches the contrasting characters of the coastal and inland areas with seaside resorts having denser concentrations of build-up and inland consisting of remote isolated farmsteads. • Geological, the underlying build up is largely Quaternary deposits of clay and silt which give rise to wet, fertile, loamy and clayey soils above.
Planned and Drained Fens (2b)	• Vast, extensive, lowlands with a consistent low-lying landscape of flat farmlands with modestly elevated areas scattered throughout. • Significant areas sit at or below sea level. • Expansive, large scale open landscape of uninterrupted vistas and vast skies provides panoramic views to distant horizons. • Rigid geometric pattern formed from an intelligible hierarchy of canalised rivers, high level drains, and ditches dictating the grain and movement patterns of the region. • Settlements are restrained, with linear villages characteristically running along roads or on pockets of elevated land whilst solitary farms are dotted across the area. • Seasonal dynamism is common with variations in colour and texture changes from the arable products to the increased activity during harvest. • Quaternary clay and silt deposits make up most of the underlying geology with wet, loamy or friable peaty soils.
Fen and Marsh Margin Farmlands (2c)	• Transitional landscape demonstrating properties characteristic of both elevated regions to the west and lowland regions to the east but not wholly typical of either. • Patchwork of medium sized fields, enclosed by hedgerows and ditches, with interspersed woodlands, copses and plantations. • Mixed agricultural use for the most part, with permanent pasture along valley bottoms.

Landscape Character Types	Key Landscape Characteristics
	• Coherent pattern and matrix of streams and field drains running west to east give an element of geometric structure to the landscape. • An ancient pattern of country roads and tracks winds across the landscape with scattered, nucleated villages typically found at the junction of north south and east west routes. • Medieval moated sites and relict ridge and furrow present provide notable interest. • The underlying geology is predominantly Jurassic mudstones, sandstones, limestones, and Cretaceous chalk, however it has limited surface expression due to widespread deposits of till.
Chalk Wolds (7a)	• Expansive, elevated, and gently sloping chalk plateau bisected by a system of valleys forming a pronounced undulating landform. • Extensive views across the vast spreads of field and sky from atop the plateau emphasise the grand scale of the regions landscape. • Large scale rectilinear fields bounded by hedgerows dominate the plateau with occasional shelter belts and clusters of beech providing minimal woodland cover. • Changing crop patterns create a dynamic change in views compared to lush pastures and wooded slopes. • Valleys provide a stark contrast to the plateau, with woodland on the slopes and rich fertile pastures hidden at the bottom. • Sparse settlement pattern across the plateau itself, with dispersed, pockets of nucleated villages sheltered within the valleys or located along spring lines. • Prehistoric archaeological elements such as west east salters' roads, long and round barrows and medieval villages can be found in the area as well as historic ridge top trackways and ancient roads. • The chalk that underlies is more than 100m depth and heavily influences the soil geology of the region with shallow, lime rich soils prevalent across the plateau and lime rich loamy soils evident in the valley bottoms.
Wolds Scarps, Ridges and Valleys (7b)	• Prominent west facing escarpment with rounded crest profile intersected by deep combes, wide river valleys and spring lines. • The summit of the escarpment provides panoramic views westwards over the vales as well as more limited views to the ridge of the rolling Chalk Wolds to the east.

Landscape Character Types	Key Landscape Characteristics
	• A mosaic of rough pasture and scrub vegetation, patches of woodland extend across the summits, ridges and steep, hummocky, slopes of the scarp. • Patchwork of mixed pastoral and arable land, bounded by mature hedgerows and intermittent woodlands found within the valleys and combes. • Visible scars of chalk, ironstone outcroppings, and spoil heaps found across the region. • Dispersed settlement pattern with scattered farmsteads on the slopes and nucleated spring line villages at the base of the escarpment. • Complex landform with areas of landslips and wet flushes. • Historic and archaeological features such as ancient roads and trackways, medieval villages, and burial mounds found within the area. • Reduced Upper Cretaceous Chalk thickness, with exposure of Lower Cretaceous rocks in places. Mixed geology of soils are present throughout ranging from light lime soils and sandy loams through to clay soils and coarse permeable loams.

Regional level – Historic Landscape Characterisation (HLC)

2.8.B.2.3 English Heritage provide Historic Landscape Characterisation (HLC) which reveals historic patterns and connections within the landscape. The Historic Landscape Characterisation for Lincolnshire divides the county of Lincolnshire into ten different Historic Landscape Character Areas, four of which; The Grazing Marshes, The Wolds, The Fens and The Wash, are traversed by the proposed order limits.

Table 2.8.B-3 – Historic Landscape Characterisation

Historic Landscape Character Area	Landscape History Characteristics
The Grazing Marshes	• Consists of two broad areas: The Outmarsh & The Middle Marsh. • Two areas are keenly connected by historical land use and agricultural practices were formed by distinctly different processes. • Middle Marsh is higher than Outmarsh and consists of greater proportion of historic settlements • Outmarsh formed by phases of drainage and reclamation over centuries. First was medieval salt making which resulted in mounds of spoil consisting of sand and silt, then as mounds increased in size and number the sea receded.

Historic Landscape Character Area	Landscape History Characteristics
	• Middle Marsh formed by parliamentary acts and private agreements which resulted in planned drainage and enclosure to establish farmsteads. • Also, evidence of land loss due to erosion during medieval period. • Coastal settlements built on reclaimed land but have grown as a result from tourism.
The Wolds	• The result of enclosure of a largely typical open field farming regime. • Earliest enclosures found in close proximity to historic settlements, whether deserted or surviving. • Represents the transition from arable to livestock farming, predominantly for wool farming. • Enclosures in the Wolds are typically more extensive and widespread than in the rest of the county. • Whilst different to the surrounding lowlands the Wolds is closely connected to them all the same. The many drove roads were formed to allow Wold farmers to access the fertile lowlands for grazing to fatten their stock. • In more recent years land has reverted back to arable farming, with larger fields in order to accommodate modern machinery
The Fens	• Prior to drainage it was a landscape of rivers, meres and seasonally inundated land. • First drained by Romans. Full stable drainage in 18th/19th century • Several fens drained through parliamentary acts • Fens south of Spalding drained differently and done to provide access to grazing land. • Most far-reaching changes occurred centuries ago but post second world war field boundaries were removed to make larger fields for modern arable agricultural processes. • The shift towards mechanisation also reduced people employed in the area which affected farmsteads and associated buildings, some of which fall into disrepair.
The Wash	• Much of the farmland changed from pastoral to arable within the last century • Historic boundaries removed to accommodate modern farming techniques – large prairie style fields • Gradual accretion, defence and enclosure resulting in sea banks (still visible today) • Dry land since the end of Roman period.

Historic Landscape Character Area	Landscape History Characteristics
	• Townland islands. Anglo-Saxon settlement • Subsequent field boundary pattern; more planned and straight closer to the coast. • Former creek courses preserved within field pattern, part of important drainage systems • Battle against the sea continues; sea levels due to rise enough to threaten low-lying farmland in next 50 years. • Pillboxes and other defensive installations remain

Local Level – District Landscape Character Assessments

2.8.B.2.4 At the local level, the English Onshore Scheme crosses the administrative boundaries of various District and Borough Councils. The **Table 2.8.B-4** below identifies all District Councils that the English Onshore Scheme crosses through or where the study area buffer extends into, alongside Borough Councils that have produced Landscape Character Assessments.

Table 2.8.B-4 – Local Level Landscape Character Assessments

District and Borough Councils	Landscape Character Assessments
King's Lynn and West Norfolk Borough Council	• King's Lynn and West Norfolk Borough Landscape Character Assessment.
Fenland District Council	• Landscape Character Areas identified within Fenland Local Plan (2021-2040).
South Holland District Council	• No published Landscape Character Assessment. Figures used refer to the boundaries of Landscape Character Types identified within Landscape Capacity Study.
Boston District Council	• Landscape Character Assessment of Boston Borough (July 2009)
East Lindsey District Council	• East Lindsey District Landscape Character Assessment

2.8.B.2.5 The following Landscape Character Units have been identified after reviewing available Landscape Character Assessment information at the local level. South Holland District Council have not published local Landscape Character Assessments; these have been identified following the desktop review of the East Midlands Region Landscape Character Assessment, a review of available desktop mapping and information combined with field surveys.

2.8.B.2.6 **Table 2.8.B-5** below lists the key characteristics of Landscape Character Units that fall within the study area alongside Landscape Character Areas identified within South Holland District Council.

Table 2.8.B-5 – Characteristics of Landscape Character Units

District and Borough Councils	Landscape Character Units	Key Landscape Characteristics
King's Lynn and West Norfolk Borough Council	B1: Terrington LCA	• Predominantly flat, low-lying landscape, dominated by intensively managed farmland. • Predominantly arable fields bounded by reed lined drainage ditches. • Far-reaching, panoramic views across the area, occasionally framed by shelterbelts. • Seaward views are defined by the visible sea defence banks on the horizon. • Minimal development in a widely dispersed settlement pattern.
	D3: Terrington St. John LCA	• Very flat lowland area consisting of small, generally regular, fields demarcated by dykes and ditches. • Small bridges that cross the wider drains and channels are a distinctive feature throughout the region. • Views across the area are dominated by rows of poplars, communication masts and fruit orchards which can create a clustered skyline in places. • Minimal build-up in the area with a mainly dispersed settlement pattern of individual farmsteads or scattered houses. • A number of straight, fairly busy roads where more linear or nucleated settlement pattern can be seen cut through from north to south.
	D2: Walpole, Terrington and Clenchwarton LCA	• Large scale, low-lying region with extensive views in all directions occasionally framed by fruit orchards that are scattered throughout. • Mosaic of medium sized, irregular, predominantly arable, fields bordered by low dykes and ditches follow the course of small rural roads. • The extensive views give way to a somewhat cluttered horizon in places, due to a variety of vertical elements of differing sizes in all directions. • Settlement pattern consists of dispersed farmsteads and nucleated hamlets and villages.

District and Borough Councils	Landscape Character Units	Key Landscape Characteristics
		• Area is dissected by the A17 & A47, where fast moving traffic provides a constant source of noise and movement.
	D1: Clenchwarton Marsh LCA	• Strikingly flat, open and expansive landscape with panoramic views, particularly looking to the northeast and west. • The banks of the River Great Ouse draw the eyes to the east. • Southwards the roofs of the neighbouring areas clutter the skyline slightly. • Organic, irregular field pattern with sinuous drainage ditches that demarcate the predominantly arable fields • Development is scarce with a highly dispersed settlement pattern of scattered farmsteads.
	E1: Tilney All Saints LCA	• Generally undeveloped, low-lying, flat landscape, dominated by intensive arable farming. • Fields are typically bounded dykes and ditches and transition from large, irregular fields to the north into smaller geometric fields towards the south. • Vertical elements, draw the eye across this open, large-scale, continuous landscape. Views to the south are panoramic, whereas views to the more built-up neighbouring areas tend to be more cluttered. • Despite the fast-moving transport corridors of the A17 and A47 in the north, the area retains a strong sense of tranquillity. • Isolated, scattered farmsteads, typically surrounded by wind break trees are the only forms of settlement in the area.
	D4: Emneth, West Walton and Walsoken LCA	• A patchwork of arable fields, fruit orchards, plantations and pasture encompass this flat, low-lying landscape. • The historic network of dykes and ditches, lined with reeds, rushes and shrubs divide the large fields and provide topographical variety. • Views of the landscape appear cluttered due to the frequent rows of poplars, tall vegetation, orchards, large scale farms, glasshouses and

District and Borough Councils	Landscape Character Units	Key Landscape Characteristics
		pylons throughout the area providing several points of focus. • A predominantly linear settlement pattern can be seen, with both villages and farmsteads found alongside the rural roads. • The busy transport corridor of the A47 as well as several other busy urban roads can impact the tranquillity of the area.
Fenland District Council	Wisbech Settled Fen LCA	• Relatively flat landscape that is heavily settled compared to the surrounding peaty Fens. • Linear waterways, rivers and ditches throughout the region. • Fruit orchards and other plant nurseries form a sub area west of Wisbech. • Settlement pattern includes a number of nucleated villages focused around and following the local roads.
	The Fens LCA	• This landscape character is centrally located but extends across, and forms, most of the district. • Large scale, flat and open landscape with extensive views and large skies. • Largely unsettled, arable landscape with isolated villages and scattered individual properties • Very few hedgerows in the landscape and long straight roads elevated above the surrounding fields.
South Holland District Council	Wash Marshes LCA	• Large scale, open, flat coastal landform with extensive areas of salt marsh. • Expansive panoramic views over the sea with wide, uninterrupted views of the horizon. • Complex, organic pattern of winding creeks and drainage channels and ditches flowing down to the sea. • Evidence of human occupation is limited to occasional isolated farmsteads and military structures.
	Settled Fens LCA	• Predominantly flat landform with organic lines of winding roads and rivers combining with the field boundaries of drainage ditches, channels and hedgerows.

District and Borough Councils	Landscape Character Units	Key Landscape Characteristics
		• Tree cover is scattered throughout, with mature trees and shelterbelts located around settlements and farmsteads. Clumps of woodland are also present across the area. • Views are often restricted or foreshortened by vegetation, landmark features or urban fringe clutter. • Nucleated settlement pattern primarily often identifiable by landmark features such as church spires or towers.
	Peaty Fens LCA	• Large scale expansive flat landform, with extensive panoramic views of a largely uninterrupted skyline. • Mosaic of geometric and linear fields of predominantly arable use typically bounded by drainage channels and ditches. • Tree cover is predominantly restricted to shelterbelts around associated farmsteads with occasional lone field trees. • Network of long straight roads dissecting the landscape often elevated above the surrounding fields. • Low volume of settlement, with scattered farmsteads throughout and linear stretches of small towns and hamlets.
Boston District Council	A1: Holland Reclaimed Fen LCT	• Flat and low-lying reclaimed fenland. • Intensive arable landscape with geometric pattern with narrow roads and trackways alongside drains, dykes and ditches. • Field boundaries are typically open with wet ditches, dykes and drains and the occasional hedgerow. • Sparse tree cover confined to shelterbelts, with occasional hedgerows and small blocks of mixed woodland with shrubby edges. • Sparsely populated with occasional small hamlets, scattered farmsteads, and occasional rows of former workers' cottages.
	A2: Wrangle Common to Freiston Ings Reclaimed Fen LCT	• Flat and low-lying reclaimed fenland. • Intensively farmed arable landscape laid out with a strong geometric pattern of narrow roads and tracks alongside drains, dykes and ditches.

District and Borough Councils	Landscape Character Units	Key Landscape Characteristics
		• Tree cover is sparse and is mostly confined to tree shelterbelts around farmsteads, dwellings and settlements on the edge of the character area. There are very few remnant hedgerows and an occasional small block of deciduous woodland. • Sparsely populated with scattered farmsteads, former workers' cottages and occasional derelict farm cottages and field buildings. • Limited access with few roads and tracks and very occasional short dead end public rights of way.
	B1: Bicker to Wyberton Settled Fen LCT	• A largely flat landform slightly elevated above the adjacent drained fenland. • A relatively large-scale organic network of winding roads is infilled by a geometric field pattern of predominantly arable fields. • A scattering of visible heritage and archaeological features, Listed Buildings and some designated Conservation Areas. • Generally, tree cover is sparse with occasional hedgerows and hedgerow trees and infrequent blocks of mixed woodland. • Settlement pattern of widely spread villages, with farmsteads and dwellings scattered in between.
	B2: Frampton to Fosdyke Settled Fen LCT	• A largely flat farmed landscape with a patchwork of predominantly arable fields with some pasture. • A small-scale landscape pattern of winding narrow roads enclosing small irregularly shaped fields bounded by dykes and ditches. • Tree cover is generally sparse with occasional hedgerows and trees and infrequent blocks of mixed woodland. • Scattered heritage and archaeological features, Listed Buildings, some designated Conservation Areas and some areas under Environmental Stewardship Schemes. • Dispersed settlement pattern of small, nucleated villages with farmsteads and roadside dwellings scattered in between.

District and Borough Councils	Landscape Character Units	Key Landscape Characteristics
	B3: Wrangle to Cowbridge Settled Fen LCT	• Largely flat, but slightly elevated above the drained fenland to the west and the reclaimed coastal marsh to the east • A small to medium scale pattern of winding roads, ditches and dykes infilled with a mix of both geometric and irregularly shaped arable fields. • A scattering of visible heritage and archaeological features, Listed Buildings and some designated Conservation Areas • Some open views with big skies and others foreshortened by settlements within groups of trees. • Scattered hamlets, farmsteads and dwellings alongside minor roads for the most part, but a distinctive line of historic villages and string of smaller settlements follow the winding A52 road.
	C1: Wellend to Haven Reclaimed Saltmarsh LCT	• Fairly remote, flat landscape of reclaimed saltmarsh which is surrounded and enclosed by sea banks of varying ages. • A predominantly geometric pattern of medium to large scale fields bordered by open ditches and dykes. • Tree and hedgerow cover is mostly confined to the inland relict sea bank and shelter belts around farmsteads and dwellings. • Sparsely populated with occasional farmsteads and dwellings.
	D1: Wellend to Haven Wash Saltmarsh LCT	• An extensive area of open saltmarsh and intertidal winding mud and sand flats, and mud creeks. A largely inaccessible, remote and wild landscape. • A mosaic of saltmarsh vegetation, open sand, mudflats and tidal areas. • Protected by many international and national nature conservation designations. • Built structures are virtually absent and there are no roads, and only one track
East Lindsey District Council	A1: Stickney to Sibsey Reclaimed Fen LCA	• Expansive, flat, open, low-lying, drained fenland landscape.

District and Borough Councils	Landscape Character Units	Key Landscape Characteristics
		• Predominantly, intensively farmed arable fields bordered by ditches with occasional hedgerows or remnant hedgerows. • Extensive grid pattern across the region formed by hierarchical network of dykes, emphasized by raised roads and communication infrastructure. • Tree cover is sparse, with occasional shelter belts along some roads and around dwellings. • Generally remote and tranquil away from the A16 corridor. • Sparsely populated with widely scattered farmsteads, small linear hamlets and occasional groupings of farm cottages.
	B1: Wainfleet All Saints to Friskney Settled Fen LCA	• Largely flat, with some gentle undulations and slight elevation above the surrounding fenlands and coastal marshes. • Organic pattern of predominantly arable fields occasionally bordered by hedgerows. • Tree cover consists of mature tree planting and shelter belts focused around farmsteads and dwellings. • The busy A52 along the eastern boundary feeds a limited network of minor roads. • Rich in historical features and archaeological remains. • Dispersed nucleated settlement pattern of villages and towns as well as scattered farmsteads and dwellings throughout.
	C1: Wainfleet Reclaimed Saltmarsh LCA	• A relatively remote man-made flat landscape of drained reclaimed saltmarsh. • Intensive large to medium scale arable fields bordered by open ditches and dykes with a strong rectilinear pattern. • Tree cover is sparse with few trees or hedgerows found within the region. • Views from the lower areas are restricted by lines of relict grassed sea banks, however from atop these sea banks panoramic, far-stretching views across the Wash and flats are achieved. • Whilst the area is relatively remote, the sense of tranquillity is dampened by the activity of field workers and intensive farm machinery.

District and Borough Councils	Landscape Character Units	Key Landscape Characteristics
		• Sparsely populated with occasional farmsteads and dwellings, with a general increase of build-up along the corridor of the A52.
	D1: Wainfleet Wash Saltmarsh LCA	• Extensive, largely inaccessible, network of open saltmarsh and inter-tidal flats, punctuated with winding creeks. • Panoramic and expansive views of wide horizons and open skies with added dynamism influenced by changing tides, light and weather conditions. • Highly protected by many international and national conservation designations. • Void of settlement except for a scattering of man-made elements associated with the RAF weapons range.
	G2: Little Cawthorpe to Skendleby Wolds Farmland LCA	• Elevated rolling landscape of ridges and valleys with a gradual overall descent to the east, west and south. • Mosaic of arable and pastural farmland, with frequent woodland blocks, hedgerows and ancient and semi-ancient woodlands. • Network of streams and rivers draining east and south. • High level of landscape and nature conservation designations and lies within the Lincolnshire Wolds. • Range of heritage features including historical and archaeological remains. • Dispersed nucleated settlement pattern with villages typically nestled within valleys.
	G3: Hainton to Toynton All Saints Wolds Farmland LCA	• Elevated landscape of undulating ridges, valleys, with plateaus and scarps throughout. • Mixed agriculture with predominantly arable fields, but pasture around villages and on steeper slopes. • Mature hedgerows with trees interspersed and occasional blocks of woodland dotted across the whole area. • Most of the area is within the boundary of the Lincolnshire Wolds and other parts are identified as AGLV leading to a high level of landscape and nature conservation designations.

District and Borough Councils	Landscape Character Units	Key Landscape Characteristics
		• Rich in heritage and archaeological features. • Isolated farmsteads and nucleated settlements hidden within valleys are scattered throughout the region.
	H1: Mareham to Little Steeping Fenside Woodland & Farmland LCA	• Rolling, low-lying landscape that rises gently towards the Lincolnshire Wolds. • Patchwork of arable fields broken up by some areas of ancient and semi-ancient woodland and grazed parkland. • Network of streams, ditches, and dykes drain towards the fens becoming more geometric in layout towards the south. • Lies within an Area of Great Landscape Value (AGLV) • Dispersed settlement pattern of estate farmsteads and small traditional villages.
	I1: Holten le Clay to Great Steeping Middle Marsh LCA	• Gently undulating foothills rising towards the Lincolnshire Wolds. • Predominantly arable farmland, with some pastural fields bounded by ditches and dykes. • Blocks of deciduous woodland scattered throughout with a greater concentration found in the southwest. • Meandering rivers and streams, and the embanked Louth Canal flow eastwards towards the coast. • Nucleated settlements scattered throughout with a linear merging of villages around the foot of the Wolds.
	J1: Tetney Lock to Skegness Coastal Outmarsh LCA	• Low-lying, predominantly flat, drained coastal plain contained to the east by sea embankments, sand dunes, and sea defences. • Extensive network of drains, ditches and dykes with a strong geometric pattern in the northern and central parts of the area. • Rivers and the historic Louth Canal cross from the Lincolnshire Wolds in the west towards the coast. • Predominantly mixed agricultural land use with both arable and pasture, and some remnants of ridge and furrow.

District and Borough Councils	Landscape Character Units	Key Landscape Characteristics
		• Sparse tree cover, with occasional ornamental trees and hedgerows around settlements. • Several important coastal nature reserves with a high level of nature conservation designation. • Sparsely scattered settlements inland with more densely nucleated resorts found on the coast.
	K1: Donna Nook to Gibraltar Point Naturalistic Coast LCA	• Flat tidal strip with some stretches of long sandy beaches and mud flats with areas of saltmarsh. • Wide, open, panoramic views extending out to sea with inland view being contained by promenades, sea banks or sand dunes. • Protected by international, national and local nature conservation designations. • Drains flowing onto the tidal marshes create dendritic patterns emphasised by vegetation. • Large areas used by MOD and designated MOD danger areas. • Void of settlements but some development and small-scale structures in MOD areas.

Local Level – Lincolnshire Wolds National Landscape

2.8.B.2.7 A small portion of the study area associated with the English Onshore Scheme encroaches into the Lincolnshire Wolds area. **Table 2.8.B-6** below details key qualities of Landscape Character Areas that fall within the two Landscape Character Areas: The Ridges and Valleys of the South-West and The South - Eastern Claylands as identified within the Lincolnshire Wolds Area of Outstanding Natural Beauty Management Plan (2018-2023).

Table 2.8.B-6 – Key qualities of relevant Landscape Character Areas within the National Landscape

National Landscape	Landscape Character Units	Key Landscape Characteristics
Lincolnshire Wolds	The Ridges and Valleys of the South-West and The South - Eastern Claylands Landscape Character Areas (LCA's)	**Common characteristic:** • **Scenic beauty & rural charm:** Undulating landscape with strong cohesive identity throughout and agriculture as a core underlying feature. • **Expansive, sweeping views:** Panoramic, dramatic vistas from peaks and elevated

National Landscape	Landscape Character Units	Key Landscape Characteristics
		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. • **Farmed land:** Rectilinear fields of agricultural cultivation cover most of the area with additional areas of permanent grassland. • **Chalk upland – plateau & valley landscape:** Series of sandstones, ironstones and clay underlie the chalk capping and form the essential character of the Wolds. • **Woodlands –** woodlands planted in 18th and 19th-century woodlands are frequently present along rivers, streams and ponds. • **Roadside verges and green lanes –** frequent in both LCA's. • **Village character, including churches –** Traditional villages and market towns add to the charm of landscape.
	The South - Eastern Claylands Landscape Character Area (LCA)	**Differentiating characteristics:** • Calcareous, meadow, pasture & wet grasslands. • Ancient woodlands comprising of Oak and Ash. • Ancient route-ways e.g. Barton Street.
	The Ridges and Valleys of the South-West Landscape Character Area (LCA)	• Ancient woodlands – Alder Carr. • Frequent hedgerows. • Ancient route-ways e.g. Bluestone Heath Road. Frequent presence of archaeological features e.g. Burial mounds & monuments, Deserted medieval villages, Victorian planned farmsteads, mainly built of brick and housing livestock and Moated sites.

2.8.B.3 Landscape character Assessment

2.8.B.3.1 The section below presents the assessment of landscape effects on the identified Landscape Character Description Units at the Regional, Local, and Route Corridor scale.

2.8.B.4 National Character Areas

Table 2.8.B-7 – Landscape effects on the Lincolnshire Coast and Marshes NCA

NCA Profile: 42 Lincolnshire Coast and Marshes (NE521). Natural England (2014)
Sensitivity
Value: Most of the Lincolnshire Wolds is located within adjacent, NCA Lincolnshire Wolds, with only 3% falling within the Lincolnshire Coast and Marshes NCA, however the landscape of this NCA forms part of the landscape setting of National Designation. This NCA includes a range of ecological designations such as Donna Nook National Nature Reserve (NNR) or Saltfleetby-Theddlethorpe (NNR) and Gibraltar Point (NNR). At the southern extent of the NCA, there is also a Special Protection Area (SPA). The NCA also includes several sites of archaeological interest, including remnants of old salt workings and ancient settlement sites, adding to the landscape's cultural and historical value. The recreational value of the area is generally high, as coastal resorts and paths continue to draw in tourists alongside marshes, with recreational value subsiding in the core and increasing again closer to the Lincolnshire Wolds. The landscape is generally in good condition. The Lincolnshire Coast and Marshes offer a range of panoramic views with scenic landscapes that are frequently present across marshes to the North Sea. The tranquillity is generally medium, with landscape pockets of high tranquillity, such as marshes, and areas of lower tranquillity closer to the key transport corridors or settlements, similarly to wildness being generally medium. The coastal landscape is one of the distinctive features of this area. Overall, the landscape value of this NCA is **high**.
Susceptibility: The lower lying and gently undulating landform is typically of medium susceptibility to the proposed change, however, of higher susceptibility in some places, such as coastal dunes. Dominating agricultural land use is of lower susceptibility to the proposed change as there is a large potential for restoration of agricultural land use. Outside of ecological designations, which are highly susceptible, vegetation is generally of a lower susceptibility with relatively sparse cover and a greater occurrence around settlements as opposed to field boundaries. The open views of the coastline and skylines characteristic of the region are of a higher susceptibility, further inland from the coast the views are often foreshortened by vegetation or settlements reducing the areas overall susceptibility. Although distinctive landscape features are present in some areas, most of them can be potentially avoided through the routeing exercise and, therefore, are of medium susceptibility. This NCA will be affected directly by the proposed change. Overall, the landscape susceptibility of this NCA is **high**.
Sensitivity: Overall, the sensitivity of this NCA to the English Onshore Scheme is **high**.

NCA Profile: 42 Lincolnshire Coast and Marshes (NE521). Natural England (2014)

Magnitude

Construction: Approximately 22km of the route corridor falls within this NCA, and the change will occur in the most southern part, occupying approximately one-third of the NCA area. The key sources of change along this section would be the construction associated with the landfall area and construction work associated with the undergrounding of the HVDC cable. Construction typically occupies a corridor of 76m in width will and will comprise excavation, topsoil and subsoil storage and backfilling, and movement of construction vehicles along temporary haul roads and existing roads providing access, whilst trenchless methods may be used in some locations. The routeing exercise avoided key areas of landscape sensitivity. However, the works at the landfall area will affect a limited area along the coastline. Some loss of vegetation is expected, including occasional trees, where the route crosses field boundaries; however, there are good opportunities to mitigate the loss of vegetation. Construction will introduce uncharacteristic activities and movement across a large scale and the medium extent of the NCA. Construction within the NCA will be medium term and reversible. Overall, the magnitude of change will be **medium,** although, at a more local scale within the NCA, the change may be perceived as of high magnitude.

Year 1: No above ground infrastructure will be required along the indicative zone for underground cable assets except for small marker posts and concrete inspection chambers associated with the landfall area. Agricultural land use will be restored however, crops will not be fully restored alongside mitigation planting. The size and scale of change will reduce to low. The change will be long-term and reversible across a medium geographical extent of the LCA. Overall, the magnitude of change will reduce to **low**.

Year 15: Agricultural land will be fully restored alongside a network of hedgerows, with replacement trees providing effective landscape integration. The permanent easements will remain, affecting slightly the configuration of field boundary vegetation planting. The magnitude of change will reduce to **negligible**.

Significance

Construction: Combined high sensitivity with medium magnitude of change will result in **major adverse and significant effects**.

Year 1: Combined high sensitivity with a low magnitude of change will result in moderate adverse effects and not significant as the change in landscape will have limited impact on the key qualities of the landscape within the scale of NCA.

Year 15: Combined high sensitivity with negligible magnitude of change will result in minor adverse and not significant effects.

Table 2.8.B-8 – Landscape effects on The Fens NCA

NCA 46: The Fens (NE424). Natural England (2013)

Sensitivity

Value: The fenland landscape wraps around the Wash Estuary and includes a small proportion of the Norfolk Coast National Landscape. This NCA includes a range of ecological designations, such as Site of Special Scientific Interest (SSSI), NNRs, LNRs (Local Nature Reserve), and others. Several sites of heritage interest, including historic towns such as Ely, are scattered across the NCA, highlighting the higher value of the landscape. Recreational opportunities are generally limited and of medium value due to the frequent presence of drains, but they increase further inland. Landscape across NCA is generally in good condition. Perceptual qualities of views and landscape characteristics is unique with often serene aesthetic qualities characterised by wide views of open horizons with occasional hedgerows or tree lined drains, with areas near the Wash being more open and less vegetated than elsewhere and therefore of higher value. The tranquillity is generally high. However, the sense of wildness varies considerably and is limited in some areas, whereas areas closer to The Wash are of considerably higher wildness. Overall, the landscape value of this NCA is **high**.

Susceptibility: This NCA comprises largely flat and low-laying landform and is, therefore, less susceptible to the Proposed Development. The agricultural land use is also of lower susceptibility, as it presents good opportunities for reinstatement. Vegetation is generally of low susceptibility overall, as it is sparse across the majority of the NCA. The landscape consists of a mixture of medium-scale and small-scale fields; however, due to field boundaries typically being open, the feeling of a larger scale dominates, resulting in an overall low susceptibility to change. Vast, open, panoramic views of skylines are highly susceptible to change, though these can be foreshortened by vegetation and settlements in places. The susceptibility of tranquillity and wildness to large scale construction is high. This NCA will be affected directly. Overall, the landscape susceptibility of this NCA is **medium**.

Sensitivity: Overall, the sensitivity of this NCA to the English Onshore Scheme is **high**.

Magnitude

Construction: Most of the English Onshore Scheme falls within the Fens NCA. Therefore, the extent of change will be large across this NCA. The key change would be the underground routeing of the HVDC cable and the presence of permanent and temporary compounds along the route. These works will require excavation, temporary topsoil storage and movement of construction vehicles within the corridor along temporary access tracks and local roads. Construction fencing will be a noticeable feature affecting the perceptual qualities of these open landscapes. At the southern end of the route, apart from works associated with the HVDC undergrounding, the key source of change will be the introduction of the new Walpole B Substation alongside two converter stations and works associated with the undergrounding of HVDC cable. The scale and size of change will be large alongside geographical extent. The change will be short-term and reversible. Overall, the magnitude of change will be **medium**.

Year 1: In year one, agricultural land use will be restored, with the extent of the route recognisable in vegetation gaps, and some crops not being fully established. The presence of converter stations and a new Walpole B Substation will result in the addition of infrastructure elements to the open landscape, where infrastructure and industrial use are limited but under growing pressure from developments such

NCA 46: The Fens (NE424). Natural England (2013)
as solar farms and new overhead power lines. This change will primarily affect the rural character around local villages as mitigation planting will not be effective in year one. The size and scale of change will reduce to medium. The change will be long-term and reversible across a large geographical extent of the LCA. Overall, the magnitude of change will reduce to **low**. **Year 15:** Agricultural land will be fully restored alongside a network of hedgerows. The mitigation planting will provide effective landscape integration to converter stations and new Walpole B Substation. However, due to the size and scale of change being medium, the alteration to the landscape will be perceptible by local receptors. Overall, the magnitude of change will reduce to negligible.
Significance
Construction: Combined high sensitivity with a medium magnitude of change will result in **major adverse and significant effects**. **Year 1:** Combined high sensitivity with a low magnitude of change will result in moderate adverse and not significant effects, as the landscape character will be largely restored. **Year 15:** Combined high sensitivity with a negligible magnitude of change will result in minor adverse and not significant effects.

Table 2.8.B-9 – Landscape effects on Donna Nook to Gibraltar Point Naturalistic Coast LCA

Donna Nook to Gibraltar Point Naturalistic Coast LCA East Lindsey District Landscape Character Assessment (July 2009)
Sensitivity
Value: This LCT does not include landscape designations but includes numerous ecological designations such as Sites of Special Scientific Interest, Special Areas of Conservation (SAC), SPA's, and a Ramsar site alongside three National Nature Reserves: Gibraltar Point, Saltfleetby, Theddlethorpe Dunes, and Donna Nook alongside submerged oak forest near Anderby Creek. There are undesignated remains of WWII heritage features such as pill boxes. No official rights of way or roads exist, but National Nature Reserves are accessible alongside the shoreline, used frequently by walkers and horse riders. The landscape is overall in intact condition. The scenic value is high, with open and vast skies of sea views and more enclosed inward views, occasionally disrupted by recreational facilities. The landscape of this LCA is generally tranquil and unspoilt but under pressure from recreational use. The tidal coast with dunes is one of the key features. Overall, the landscape value of this LCA is **high**. **Susceptibility**: This LCA's landform, land cover, and scale are highly susceptible due to their distinctive character and features, such as dunes, coast, and salt marshes with varied topography. Vegetation, given the widespread presence of ecological designations, is also highly susceptible. Both the openness of the coastline and the enclosure of dunes are highly susceptible to the proposed change. A range of distinctive features across this LCA is highly susceptible to the proposed change. This LCA is likely to be affected directly by the proposed change. Overall, the landscape susceptibility of this LCA is **high**.

Donna Nook to Gibraltar Point Naturalistic Coast LCA
East Lindsey District Landscape Character Assessment (July 2009)

Sensitivity: Overall, the sensitivity of this LCA to the English Onshore Scheme is **high**.

Magnitude

Construction: Construction will require site clearance and grading to enable the installation of a landfall connecting Onshore and Offshore schemes at Anderby Creek. Site clearance will affect the existing predominantly agricultural land use. As this LCA encompasses mainly coastal areas, there will be a very small extent of construction work as the cable will be undergrounded using horizontal directional drilling, but a large compound with welfare facilities, material set down areas, horizontal drilling rig and other machinery will be required for the duration of construction. The key construction works will be within the indicative zone for underground cable assets and will include excavation to accommodate the Transition Joint Bay (TJB). Although locally, the size and scale of change will be large, within the scale of the LCA, a medium size and scale of change will be expected. Construction within the LCA will be medium term, reversible, and of medium extent. Overall, the magnitude of change will be **high**.

Year 1: Agricultural land use will be restored in areas above the indicative zone for underground cable assets. At the landfall area, some features will be introduced permanently, such as the TJB. The landform will be altered permanently. Although vegetation such as hedgerows and trees will be reinstated alongside other habitats, they will provide little landscape integration in year one. The scale and size will reduce to low. The change will be long term and reversible across a medium extent of LCA. Overall, the magnitude of change will reduce to **low**.

Year 15: Agricultural crops will be fully restored alongside a network of hedgerows, with replacement trees providing effective screening, but not fully mature. Some permanent elements of the landfall area will remain, such as the TJB. The magnitude of change will reduce to **negligible**.

Significance

Construction: Combined high sensitivity with a high magnitude of change will result in **major adverse and significant effects**.

Year 1: Combined high sensitivity with low magnitude of change will result in moderate adverse and not significant effects as the existing landscape will be largely restored, with very little above ground evidence of the English Onshore Scheme.

Year 15: Combined high sensitivity with negligible magnitude of change will result in minor adverse and not significant effects.

Table 2.8.B-10 – Landscape effects on Landscape effects on Tetney Lock to Skegness Coastal Outmarsh LCA

Landscape effects on Tetney Lock to Skegness Coastal Outmarsh LCA
East Lindsey District Landscape Character Assessment (July 2009)

Sensitivity

Value: This outmarsh landscape includes several coastal Nature Reserves and has high amenity value. Views towards the sea and Lincolnshire Wolds are frequently disturbed by wind farms. Landscape elements are in good condition, contributing to the local green infrastructure. Although man-made influences are present, large areas of this LCA are of higher tranquillity with historical patterns of drains and canals. This LCA contains areas of high recreational value, including Caravan Parks alongside good network of PRoW. The landscape of this LCA is valued at the local and regional level, resulting in **medium** value.

Susceptibility: Lower laying landform, alongside limited vegetation cover, is less susceptible to the proposed change, as field boundaries are frequently demarcated by drains. Predominantly, medium scale landscape is of medium susceptibility to the proposed change. Man-made influences are limited. There is a high degree of enclosure around settlements that lowers the susceptibility. Distinct features such as drains and windmills are of higher susceptibility. Skyline views are available, but frequently, these are interrupted by vegetation or settlements. Overall, the susceptibility is **medium**.

Sensitivity: Overall, the sensitivity of this LCA to the English Onshore Scheme is **medium**.

Magnitude

Construction: To accommodate the indicative zone for underground cable assets, construction will require site clearance of approximately 76m, affecting predominantly arable and pasture land use. The key construction works will be located along the indicative zone for underground cable assets and will comprise excavation, topsoil and subsoil storage and backfilling, and movement of construction vehicles along temporary haul roads and existing roads providing access. A range of trenchless crossings will be constructed where the indicative zone for underground cable assets will cross the drainage ditches. The permanent compound located at Anderby Creek will stretch onto this LCA partially, requiring some vegetation clearance along field boundaries. Temporary haul roads will be removed at the end of the construction period. Although locally, the size and scale of change will be large, within the scale of the LCA, a medium size and scale of change will be expected. Construction will be of a low geographical extent within the scale of LCA. Construction will be medium term and reversible. This LCA will be affected directly by the proposed change. Overall, the magnitude of change will be **medium.**

Year 1: No above ground infrastructure will be required along the indicative zone for underground cable assets except for small marker posts. The removed hedgerows and hedgerow trees will be reinstated alongside other habitats but will provide little integration in year one. As permanent easement is required, trees removed from the indicative zone for underground cable assets will be reinstated further away from their original locations. The subsoil and topsoil will be fully restored at year one, although crops may not be fully established at year one, alongside reinstatement planting. The size and scale of change will reduce to low. The change will be long term and reversible across a low geographical extent of the LCA. Overall, the magnitude of change will reduce to **low**.

Landscape effects on Tetney Lock to Skegness Coastal Outmarsh LCA East Lindsey District Landscape Character Assessment (July 2009)
Year 15: Agricultural land will be fully restored alongside a network of hedgerows, with replacement trees providing effective landscape integration. The permanent easements will remain, affecting slightly the configuration of field boundary vegetation planting. The magnitude of change will reduce to **negligible**.
Significance
Construction: Combined medium sensitivity with medium magnitude of change will result in **moderate adverse and significant effects**, as landscape character will substantially change at construction. **Year 1:** Combined medium sensitivity with low magnitude of change will result in minor adverse effects and not significant effects. **Year 15:** Combined medium sensitivity with negligible magnitude of change will result in minor adverse and not significant effects.

Table 2.8.B-11 – Landscape effects on Holton le Clay to Great Steeping Middle Marsh LCA

Landscape effects on Landscape effects on Holton le Clay to Great Steeping Middle Marsh LCA East Lindsey District Landscape Character Assessment (July 2009)
Sensitivity
Value: This LCA includes the southern end of the Lincolnshire Wolds, with the remaining area of the LCA providing a setting for the Lincolnshire Wolds. Heritage designations are represented by Gunby Hall Grade II Registered Park and Garden alongside several Listed Buildings scattered around smaller settlements. Therefore, parts of this LCA provide a landscape setting for this National Landscape. The landscape of this LCA contributes strongly to the local green infrastructure through the pattern of woodlands, hedgerows, drains, and channels. This landscape contains scattered Scheduled Monuments and heritage features such as windmills, water mills, and some Ancient Woodlands. This landscape is generally tranquil. Overall, the value of the LCA is **high**. **Susceptibility**: Gently undulating landform alongside large to medium scale fields is of medium susceptibility to the proposed change. Vegetation is of lower susceptibility as it is relatively sparse and is present more frequently around settlements rather than field boundaries. Drains and canals are distinctive features. Open views of skylines are characteristic and of higher susceptibility. These are foreshortened in places by vegetation, frequently present around settlements. This LCA will be affected directly by the proposed change. There are a few detracting features. Overall, the susceptibility of this LCA is **medium**. **Sensitivity**: Overall, the sensitivity of this LCA to the English Onshore Scheme is **high**.

Landscape effects on Landscape effects on Holton le Clay to Great Steeping Middle Marsh LCA
East Lindsey District Landscape Character Assessment (July 2009)

Magnitude

Construction: The indicative zone for underground cable assets will be constructed within LCA, which is adjacent to the National Landscape. Construction will directly affect the landscape near the southern end of the National Landscape, affecting the landscape setting of the southern part of the National Landscape in the medium term. Construction works will affect mainly arable farmland, requiring approximately a 76m buffer to accommodate the works associated with the construction of the indicative cable route. Construction will also require the presence of temporary haul roads and satellite compounds. As the work progresses, excavation will be required, with topsoil and subsoil storage areas along the indicative zone for underground cable assets. In places, trenchless crossing will be required. Where trenchless crossings will be required, two small compounds will be placed on both ends of the crossing. After placing the cable in trenches, backfilling operations will commence with vehicle movement along the local roads and temporary haul roads that will be dismantled at the end of construction. The size and scale of change will be large locally, however, within the scale of the LCA, there will be a medium size and scale of change. Construction will be medium term, reversible, and of a medium geographical extent within the scale of the LCA. Overall, the magnitude of change will be **medium**.

Year 1: Agricultural land use will be restored above the indicative zone for underground cable assets. Field boundary vegetation will be restored, although replacement trees will be located outside the easement area. Although vegetation such as hedgerows and trees will be reinstated alongside other habitats, the mitigation planting will provide little landscape integration in year one. The scale and size will reduce to low. The change will be long term and reversible across a medium geographical extent of the LCA. Overall, the magnitude of change will reduce to **low**.

Year 15: Agricultural land will be fully restored alongside a network of hedgerows, with replacement trees providing effective landscape integration, although not fully matured. Marker post will discretely mark out the corridor route with field boundary vegetation limited to shallow routeing hedgerows across the corridor route. Magnitude of change will reduce to **negligible**.

Significance

Construction: Combined high sensitivity with medium magnitude of change will result in **major adverse and significant effects.**

Year 1: Combined high sensitivity with low magnitude of change will result in moderate adverse and not significant effects as the existing agricultural landscape will be largely restored with very limited change above ground level.

Year 15: Combined high sensitivity with negligible magnitude of change will result in minor adverse and not significant effects.

Table 2.8.B-12 – Landscape effects on Ridges and Valleys of the South West LCA

Lincolnshire Wolds Area of Outstanding Natural Beauty Management Plan (2018-2023)

Sensitivity

Value: This LCA falls entirely within the Lincolnshire Wolds and includes several SSSI sites, a few Ancient Woodlands alongside 18th and 19th century woodlands, Beech clumps and other features of ecological interest. This LCA also includes a large number of Scheduled Monuments, Burial Mounds and Monuments. The agricultural landscape is characterised by a relatively large content of woodlands interspersed with cultivated fields. The LCA offers a range of recreational activities, from walking and cycling to horse riding and other visitor attractions. The landscape is in very good condition, with high scenic value and rural charm, and it has sweeping views towards the middle marsh and coast. Springline villages with a mix of wetland habitats are characteristic features. The frequent presence of woodlands increases the sense of tranquillity and remoteness. Overall, the value of the LCA is **high**.

Susceptibility: The gently sloping and undulating landform to the east is moderately susceptible to the proposed change. Agricultural land use is generally lower, but the frequent presence of woodlands is higher. The landscape is generally medium scale, but large areas of small scale field patterns are common, resulting in higher susceptibility to the proposed change. Openness varies, but typically, agricultural fields have a medium level of enclosure; however, they are increased in places by elevated landform, allowing for longer views and, therefore higher susceptibility to the proposed change. Distinctive features are frequent and, hence, of higher susceptibility. The tranquillity is also of higher susceptibility alongside wildness. This LCA will be affected directly by the proposed change. Overall, the susceptibility of this LCA is **high**.

Sensitivity: Overall, this LCA is of **high** sensitivity.

Magnitude

Construction: The indicative cable route will marginally encroach into this LCA. However, construction will need to cross through a roadside tree belt along Gunby Road and a distinct tree belt west of Gunby Hall. The works will take place within an area protected by National Landscape Designation. Construction works will affect mainly arable farmland, requiring approximately a 76m buffer to accommodate the works associated with the construction of the indicative zone for underground cable assets. However, where the excavation will cross through a tree belt, the width of the indicative cable corridor will be reduced to the minimum width required for the works. The works will require excavation and topsoil storage in areas along the indicative zone for underground cable assets. After placing the cable in trenches, backfilling operations will commence with vehicle movement along the local. The size and scale of change will be large, locally; however, within the scale of the LCA, there will be a low size and scale of change. Construction will be medium term, reversible, and of a low geographical extent within the scale of the LCA. Overall, the magnitude of change will be **medium**.

Year 1: Agricultural land use will be restored above the indicative zone for underground cable assets. Field boundary vegetation alongside tree belts will be restored, although replacement trees will be located outside the easement area. Although vegetation such as hedgerows and trees will be reinstated alongside other habitats, the mitigation planting will provide little landscape integration in year

Lincolnshire Wolds Area of Outstanding Natural Beauty Management Plan (2018-2023)
one. The scale and size will reduce to low. The change will be long term and reversible across a low geographical extent of the LCA. Overall, the magnitude of change will reduce to **low**. **Year 15**: Agricultural land will be fully restored alongside a network of hedgerows, with replacement trees providing effective landscape integration, although not fully matured. Marker post will discretely mark out the corridor route with field boundary vegetation limited to shallow routing hedgerows across the corridor route. Magnitude of change will reduce to **negligible**.
Significance
Construction: Combined high sensitivity with a medium magnitude of change will result in **major adverse and significant effects**. **Year 1:** Combined high sensitivity with a low magnitude of change will result in moderate adverse and not significant effects as there are good opportunities for landscape restoration, although very small-scale loss of mature trees will occur. **Year 15:** Combined high sensitivity with negligible magnitude of change will result in minor adverse and not significant effects.

Table 2.8.B-13 – Landscape effects on Mareham to Little Steeping Fenside Woodland and Farmland LCA

Landscape effects on Landscape effects on Mareham to Little Steeping Fenside Woodland and Farmland LCA Lincolnshire Wolds Area of Outstanding Natural Beauty Management Plan (2018-2023)
Sensitivity
Value: This LCA lies south of the Lincolnshire Wolds (3.5km at the closest distance). There are no landscape designations within this LCA. There are no ecological designations except for a few woodlands designated as SSSI, such as Troy and Fulsby Wood. There are two Registered Parks and Gardens, Revesby Abbey Grade II Registered Park and Garden and Scrivelsby Court Registered Park and Garden, alongside scattered Listed Buildings and Revesby Conservation Area. Other heritage features include mud and stud buildings at Wood Enderby and West Keal and historic stone churches and windmills such as those found at Mareham le Fen. Recreational opportunities are limited. The Public Rights of Way network is restricted mainly to short PRoW around settlements and hamlets. The agricultural landscape is overall in good condition. Longer views towards the Borough of Boston and to Boston Stump to the south and to closer church spires and towers within settlements in and out of the area are available, with scenic views that are medium and high in places. Large areas of this LCA are of high tranquillity, with wildness generally limited but increasing considerably in the eastern part of the LCA. Overall, the value of the LCA is **high**. **Susceptibility**: The landform of this LCA is generally flat or rising gently to the north. Agricultural land use is generally of lower susceptibility to the proposed change. Woodland cover tree belts are typically sparse, located more frequently around historic estates, with occasionally larger woodlands like Fulsby Wood. More pronounced field boundary vegetation and woodlands are located in the eastern part of the LCA, away from the English Onshore Scheme. The low to medium scale agricultural landscape with limited

hedgerow trees cover has medium susceptibility to the proposed change. The scenic qualities are of medium susceptibility alongside wildness. However, tranquillity will be more susceptible in certain places. This LCA will be affected directly by the proposed change. Overall, the susceptibility of this LCA is **medium**.

Sensitivity: Overall, the sensitivity of this LCA to the English Onshore Scheme is **high**.

Magnitude

Construction:-Construction will take place at the very eastern end of this LCA. It will require limited clearance works, resulting in a low scale of loss associated with field boundary vegetation. Construction will also require crossing through the river, steeping using the trenchless crossing method, and needing a small compound to enable underground drilling, affecting the tranquillity and rural character of the landscape near Little Steeping. Key construction works will be located along the indicative zone for underground cable assets and require excavation, with topsoil and subsoil storage stockpiles with temporary haul roads. Although locally, the size and scale of change will be large, within the scale of the LCA, a medium size and scale of change will be expected. Construction will be medium-term, reversible, and of a low geographical extent within the scale of the LCA. Overall, the magnitude of change will be **low**.

Year 1: Arable land use will be restored above the indicative zone for underground cable assets; however, some crops may not be fully restored. The field boundary vegetation will be replanted, but their height will not be fully restored, and any loss of trees will be mitigated outside of the indicative zone for underground cable assets. The marker post will discreetly mark the indicative zone for underground cable assets. Although vegetation such as hedgerows and trees will be reinstated alongside other habitats, it will provide little landscape integration in year one. The scale and size of change will reduce to low. The change will be long-term and reversible across a limited geographical extent of the LCA. The overall magnitude of change will reduce to **negligible**.

Year 15: Arable land will be fully restored alongside a network of hedgerows with replacement trees; although not fully matured, they will help to restore landscape character that will be very similar to the baseline scenario. Above ground level, marker posts will discreetly mark the indicative zone for underground cable assets. The magnitude of change will reduce to **negligible**.

Significance

Construction: Combined high sensitivity with low magnitude of change will result in moderate adverse and not significant effects as only a small area of LCA will be affected.

Year 1: Combined high sensitivity with negligible magnitude of change will result in minor adverse and not significant effects..

Year 15: Combined high sensitivity with negligible magnitude of change will result in minor adverse and not significant effects.

Table 2.8.B-14 – Landscape effects on Stickney to Sibsey Reclaimed Fen LCA

Landscape effects on Landscape effects on Stickney to Sibsey Reclaimed Fen LCA
East Lindsey District Landscape Character Assessment (July 2009)

Sensitivity

Value: The value of natural heritage features is medium, as a large-scale arable landscape in good condition dominates with sparse woodlands and drainage ditches. This LCA includes a few heritage features, such as Sibsey Trader Mill and WW2 pillboxes. The distinctive landscape comprises flat, low-lying, drained fenland. The scenic value is medium, as although open and expansive views are available, they are frequently foreshortened by vegetation. This LCA is largely tranquil away from the A16. Overall, the value of the LCA is **medium**.

Susceptibility: The flat and lower laying landform alongside large and medium scale fields are of lower susceptibility to the proposed change. Sparse vegetation cover along some roads and dwellings is also of lower susceptibility. The distinct features, such as dykes are of higher susceptibility. Open and vast views of skylines are of higher susceptibility; however, these are often broken up by vegetation of settlements. Frequent enclosure around settlements lowers susceptibility as it will help to integrate the Proposed Development. Few man-made influences will result in a lower susceptibility to perceptual aspects but a higher susceptibility to tranquillity. This LCA will be affected directly by the proposed change. Overall, the susceptibility of this LCA is **medium**.

Sensitivity: Overall, the sensitivity of this LCA to the English Onshore Scheme is **medium**.

Magnitude

Construction: Construction will require introducing uncharacteristic features associated with construction activity, which would replace in medium term agricultural land use. The construction along the indicative zone for underground cable assets will avoid settlements like Stickney and Sibsey, crossing largely agricultural landscapes. Construction will require medium scale removal of field boundary vegetation within the scale of LCA. During construction, the change will be associated with the excavation, the presence of topsoil and subsoil storage areas alongside the construction equipment and its movement. Construction movement will take place along temporary haul routes that will be removed before the end of construction and permanent haul routes. The size and scale of change will be large within the scale of the LCA. Construction will occupy a large extent of the LCA in medium term but will be reversible. The magnitude of change will be **high**.

Operation Year 1: Agricultural and arable land use will be restored in areas above the indicative zone for underground cable assets; however, some crops may not be fully restored at year one. Although vegetation like hedgerows and trees will be reinstated alongside other habitats, they will not provide effective landscape integration at year one. The scale and size of change will reduce to low. The change will be long term and reversible across a large extent of the LCA. Overall, the magnitude of change will reduce to **low**.

Operation Year 15: Agricultural land will be fully restored alongside a network of hedgerows, with replacement trees, although not fully mature, providing effective landscape integration. The indicative zone for underground cable assets will be fully integrated within the

Landscape effects on Landscape effects on Stickney to Sibsey Reclaimed Fen LCA East Lindsey District Landscape Character Assessment (July 2009)
landscape, with discrete marker posts remaining and replacement tree planting undertaken outside of the easement zone. The magnitude of change will reduce to **negligible**.
Significance
Construction: Combined medium sensitivity with a high magnitude of change will result in **major adverse and significant effects.** **Year 1:** Combined medium sensitivity with a low magnitude of change will result in minor adverse and not significant effects. **Year 15:** Combined medium sensitivity with negligible magnitude of change will result in minor adverse and not significant effects.

Table 2.8.B-15 – Landscape effects on Wainfleet All Saints to Friskney Settled Fen

Landscape effects on Wainfleet All Saints to Friskney Settled Fen East Lindsey District Landscape Character Assessment (July 2009)
Sensitivity
Value: This LCA does not include landscape and ecological designations, but it includes a few Listed Buildings, Scheduled Monuments, a medieval town and the port of Wainfleet All Saints with a Conservation Area. The recreational use is limited as there are few PRoW with small scale tourist and leisure activities including; small caravan parks and a golf club. Landscape elements are generally in intact condition. The views are usually of medium scenic value, frequently foreshortened by shelterbelts, hedgerows and embankments. Although wildness is limited, the landscape is largely tranquil. Salterns near Friskney are distinct features of the LCA. Overall, the value of the LCA is **medium**. **Susceptibility**: The largely flat and arable landscape is less susceptible to the proposed change. There is a notable presence of mature tree planting and shelterbelts around settlements, but more open landscapes dominate elsewhere, resulting in lower susceptibility. Smaller scale fields, although frequently separated by drains, are of higher susceptibility to the proposed change. This LCA is likely to be affected directly by the proposed change. Overall, the susceptibility of this LCA is medium. **Sensitivity:** Overall, the sensitivity of this LCA to the English Onshore Scheme is **medium**.
Magnitude
Construction: Construction works may only marginally encroach onto the western part of this LCA. Along the field boundaries, a very small scale of vegetation clearance is expected. Unlike other LCAs, there will be no excavation or topsoil storage. However, construction within adjacent Mareham to Little Steeping Fenside Woodland and Farmland LCA, Holten le Clay to Great Steeping Middle Marsh LCA, and Stickney to Sibsey Reclaimed Fen will alter the tranquillity, sense of wildness, and remoteness within this LCA.

Landscape effects on Wainfleet All Saints to Friskney Settled Fen East Lindsey District Landscape Character Assessment (July 2009)
Although locally, the size and scale of change will be large, within the scale of the LCA, a low size and scale of change will be expected, as this LCA will be affected predominantly indirectly, and the physical changes to the existing landscape will be of very small extent. The magnitude of change will be **low**. **Year 1**: Should there be any loss of vegetation within this LCA, the mitigation planting will restore the lost vegetation, although the proposed planting will not be mature at year one. As this LCA will only be marginally affected by a direct change, most of the qualities of the existing landscape will be restored. The magnitude of change will reduce to **negligible**. **Year 15**: Most qualities of the existing landscape will be restored, including agricultural land use and vegetation. Perceptual and aesthetic qualities of the landscape will also be very much similar to the existing landscape. The magnitude of change will remain **negligible**.
Significance
Construction: Combined medium sensitivity with low magnitude of change will result in minor adverse and not significant effects. **Year 1:** Combined medium sensitivity with negligible magnitude of change will result in minor adverse and not significant effects. **Year 15:** Combined medium sensitivity with negligible magnitude of change will result in minor adverse and not significant effects. **Decommissioning:** Combined medium sensitivity with low magnitude of change will result in minor adverse and not significant effects.

Table 2.8.B-16 – Landscape effects on Wrangle Common to Freiston Ings Reclaimed Fen LCA

Landscape effects on Landscape effects on Wrangle Common to Freiston Ings Reclaimed Fen LCA Boston Borough Landscape Character Assessment (July 2009)
Sensitivity
Value: This LCT does not include landscape and ecological designations, several Listed Buildings, and archaeological earthworks alongside WWII gun emplacements and pillboxes. There are limited recreational opportunities, with very few PRoW in a landscape dissected by numerous regularly arranged drains. Some recreational uses are present around Boston, such as golf clubs. The landscape is overall in intact condition. The scenic qualities are of medium value as open views of big skies are available, including Boston Pilgrim Hospital and Boston Stump and are also frequently foreshortened by vegetation. The perception of wildness is limited across relatively tranquil areas. The drainage system is a special feature of this LCT, but some are recognised as heritage features. Overall, the sensitivity of this LCA to the English Onshore Scheme is **medium**.

Landscape effects on Landscape effects on Wrangle Common to Freiston Ings Reclaimed Fen LCA
Boston Borough Landscape Character Assessment (July 2009)

Susceptibility: A flat landscape is generally less susceptible to the proposed type of change. Tree cover is generally sparse, with occasional isolated deciduous trees, and, therefore, of lower susceptibility. Frequently present drains resulted in small-scale agricultural patterns and, therefore, higher susceptibility to the Projects. The enclosure is of lower susceptibility as a strong enclosure around settlements is balanced with a more open-farmed landscape. Skyline views are frequent, often including windmills, water towers, church towers and spires; therefore, scenic qualities are of higher susceptibility. Perceptual aspects such as wildness and tranquillity are of medium susceptibility, including scenic qualities, as there is a mix of open views, including some landmarks, alongside foreshortened views, including commonplace elements. This LCA will be affected directly by the proposed change. Overall, the susceptibility of this LCA is **medium**.

Sensitivity: Overall, the sensitivity of this LCA to the English Onshore Scheme is **medium**.

Magnitude

Construction: Construction will marginally encroach into Wrangle Common to Freiston Ings Reclaimed Fen LCA. Uncharacteristic activities will be introduced during construction, including excavation, soil storage and backfilling. Some vegetation may be lost along Frith Bank. However, trenchless construction methods may allow for retaining vegetation during the works associated with the crossing, although small compounds will be required on both sides of the river crossing. Although locally, the size and scale of change will be large, within the scale of the LCA, a medium size and scale of change will be expected. Construction will be medium-term, reversible, and of a low geographical extent within the scale of the LCA. The magnitude of change will be **medium**.

Year 1: Arable land use will be restored in areas above the indicative zone for underground cable assets. Although vegetation such as hedgerows and trees will be reinstated alongside other habitats, they will provide little landscape integration in year one, with trees being replanted outside of the easement zone. The scale and size of change will reduce to low. The change will be long-term and reversible across a low extent of LCA. Overall, the magnitude of change will reduce to a **low**.

Year 15: Arable land will be fully restored alongside lost vegetation, reflecting broadly the existing landscape. Discrete post markers will mark the indicative zone for underground cable assets with replacement trees being replanted outside of the easement zone. Overall, the magnitude of change will reduce to **negligible**.

Significance

Construction: Combined medium sensitivity with medium magnitude of change will result in **moderate adverse and significant effects**. Although construction will directly affect a low extent of the LCA, most of the LCA will be affected indirectly.

Year 1: Combined medium sensitivity with low magnitude of change will result in minor adverse and not significant effects.

Year 15: Combined medium sensitivity with negligible magnitude of change will result in minor adverse and not significant effects.

Table 2.8.B-17 – Landscape effects on Holland Reclaimed Fen LCA

Landscape effects on Holland Reclaimed Fen LCA
Boston Borough Landscape Character Assessment (July 2009)

Sensitivity

Value: This LCT does not have landscape or ecological designations but has a few Listed Buildings. There are very few Public Rights of Way, and as arable land use dominates, with fields fragmented by drains, there are very limited recreational opportunities. This is a semi-remote, generally tranquil landscape with an intact agricultural landscape in good condition. Views are simple and semi-remote, with some expansive panoramas across seas of cereal crops, sometimes foreshortened by large embankments of some drains. Some views include local landmarks such as Boston Stump to the east and the rising edge of the Wolds in East Lindsey. The agricultural landscape is in a good condition. A characteristic feature of this LCT is a hierarchical grid layout of straight, open, deep drains crossed by frequent bridges, many of which now have heritage value. Overall, the value of the LCA is **medium**.

Susceptibility: Flat landform of agricultural landscape is of lower susceptibility alongside typically open field boundaries to the proposed change. Small scale field pattern combined with limited field enclosure creates a feeling of a larger scale landscape and, therefore, of lower susceptibility to the proposed change. Frequent presence of drains is of higher susceptibility. Open and expansive views are frequently available and, therefore, of higher susceptibility. The generally tranquil landscape is of higher susceptibility, in contrast to the wildness, of which perception is limited. This LCA will be affected directly by the proposed change. Overall, the susceptibility of this LCA is **medium**.

Sensitivity: Overall, the sensitivity of this LCA to the English Onshore Scheme is **medium**.

Magnitude

Construction: Construction will require the removal of field boundary vegetation at a low scale, as most fields are bound by drains. Therefore, several trenchless crossings with small compounds on both sides of the drainage channel crossing will be required. Land use will be altered along the medium extent of the LCA, as crops will be replaced with uncharacteristic construction activity. Construction will require excavation, storage of topsoil and subsoil, and the introduction of temporary haul routes that will be removed at the end of construction. Although locally, the size and scale of change will be large, within the scale of the LCA, a medium size and scale of change will be expected. Construction will be medium-term, reversible, and of a medium geographical extent within the scale of the LCA. The magnitude of change will be **high**.

Year 1: Agricultural land use will be restored in areas above the indicative zone for underground cable assets. Discrete marker posts will mark the indicative zone for underground cable assets. As there is a requirement for an easement zone, replacement trees will be planted outside of the easement zone. Although vegetation such as hedgerows and trees will be reinstated alongside other habitats, it will provide little landscape integration in year one. The scale and size of change will reduce to small. The change will be long-term and reversible across a medium extent of the LCA. Overall, the magnitude of change will reduce to a **low**.

Landscape effects on Holland Reclaimed Fen LCA Boston Borough Landscape Character Assessment (July 2009)
Year 15: Agricultural and arable land will be fully restored alongside a network of hedgerows, with replacement trees providing effective landscape integration with restored landscape being very similar to the existing landscape. The magnitude of change will reduce to **negligible**.
Significance
Construction: Combined medium sensitivity with a high magnitude of change will result in **major adverse and significant effects**. **Year 1:** Combined medium sensitivity with low magnitude of change will result in minor adverse and not significant effects. **Year 15:** Combined medium sensitivity with negligible magnitude of change will result in minor adverse and not significant effects.

Table 2.8.B-18 – Landscape effects on Bicker to Wyberton Settled Fen LCA

Landscape effects on Landscape effects on Bicker to Wyberton Settled Fen LCA Boston Borough Landscape Character Assessment (July 2009)
Sensitivity
Value: This LCT does not include landscape or ecological designations but there are a few Listed Buildings and Conservation Areas at Swinestead and Kirton Holme villages. There is a limited presence of PRoW within this LCA, but it is more frequent in comparison to the adjacent LCT's. As the LCT covers a rural landscape with few small settlements, there are limited opportunities for recreation, but again slightly more in comparison to adjacent LCT, and they include a golf course at Kirton Holme and a small leisure complex with fishing ponds on the outskirts of Boston. The landscape of this LCT is peaceful in parts but not particularly remote, with a limited sense of wildness. Views are generally open with big skies and wide horizons but are disrupted by shelterbelts around settlements. There are fewer drains than within the adjacent LCT's, resulting in larger scale fields. Saltern mounds are found to the south and east of Bicker. Overall, the value of the LCA is **medium**.
Susceptibility: The landform of this LCA is largely flat and of lower susceptibility alongside farmland use and sparse vegetation cover. This LCT has a distinctive small scale pattern created by narrow winding roads, ditches and dykes, resulting in higher susceptibility to the proposed change. The enclosure is less susceptible as it is more frequently present around settlements and balanced with a more open-farmed landscape. Open views are frequent and more susceptible to the proposed change. There is a perception of limited wildness and peaceful but not remote landscape, resulting in medium susceptibility to the proposed change. This LCA will be affected directly by the proposed change. Overall, the susceptibility of this LCA is **medium**.
Sensitivity: Overall, the sensitivity of this LCA to the English Onshore Scheme is **medium**.

Landscape effects on Landscape effects on Bicker to Wyberton Settled Fen LCA Boston Borough Landscape Character Assessment (July 2009)
Magnitude
Construction: Construction will require the removal of some field boundary vegetation, of small scale across the LCA. Construction will involve excavation, cable laying in trenches, and backfilling operations. During construction, construction vehicles will move along the existing local roads utilised for construction and also along the temporary and permanent haul routes. Construction will typically require topsoil and subsoil storage alongside material set-down areas within compounds. Although locally, the size and scale of change will be large, within the scale of the LCA, a medium size and scale of change will be expected. Construction will be medium term, reversible, and of a medium geographical extent. The magnitude of change will be **medium**. **Year 1**: Arable land use will be restored in areas above the indicative zone for underground cable assets, although not all crops may be restored at year one. Although vegetation such as hedgerows and trees will be reinstated alongside other habitats, they will provide little landscape integration in year one. The scale and size of change will reduce to low. The change will be long term and reversible across a medium extent of the LCA. The overall magnitude of change will reduce to **low**. **Year 15**: Arable land will be fully restored alongside a network of hedgerows, with replacement trees providing effective screening. The presence of easements will be barely perceptible through a reconfigured pattern of field boundary vegetation. The magnitude of change will reduce to **negligible**.
Significance
Construction: Combined medium sensitivity with a medium magnitude of change will result in **moderate adverse and significant effects** as construction will affect the medium extent of the LCA directly, with the remaining areas affected indirectly. **Year 1:** Combined medium sensitivity with low magnitude of change will result in minor adverse and not significant effects. **Year 15:** Combined medium sensitivity with negligible magnitude of change will result in minor adverse and not significant effects.

Table 2.8.B-19 – Landscape effects on Frampton to Fosdyke Settled Fen LCA

Landscape effects on Landscape effects on Frampton to Fosdyke Settled Fen LCA Boston Borough Landscape Character Assessment (July 2009)
Sensitivity
Value: This LCT does not include landscape or ecological designations but consists of heritage features such as scattered Listed Buildings, Wyberton Park alongside Swineshead Abbey and saltern mounds around Bicker. There are fewer PRoW within the LCA than in other LCTs around Boston; however, a Britain Way Long Distance Path, a promoted recreational route, crosses this LCT in an east-

west direction. Landscape elements are in intact condition. This is a fairly remote landscape with a limited sense of wildness and, therefore, of medium value. The views are generally open, but frequently, they are interrupted by tree shelterbelts, often coniferous around farmsteads and dwellings. Landmarks such as the Boston Stump and the wind farm at Bicker frequently feature within open and panoramic views, where available. Overall, the value of the LCA is **medium**.

Susceptibility: A largely flat farmed landscape with sparse vegetation cover is less susceptible to the proposed change. The low scale landscape with irregularly shaped fields is more susceptible to the proposed change. The enclosure is less susceptible as it is strong around settlements and balanced with a more open farmed landscape. Scenic qualities are generally highly susceptible as the views are largely open and panoramic, encompassing local landmarks. The perception of wildness is of lower susceptibility, whilst tranquillity is of medium susceptibility due to roads the A16 and A17. This LCA will be affected directly by the proposed change. The susceptibility of this LCA is **medium**.

Sensitivity: Overall, the sensitivity of this LCA to the English Onshore Scheme is **medium**.

Magnitude

Construction: Construction will require vegetation removal along field boundaries and works associated with crossings of drainage ditches. Construction works along the indicative zone for underground cable assets will require excavation, topsoil storage, backfilling, and other uncharacteristic construction features such as construction machinery and other equipment moving along haul roads. Construction will likely require several trenchless crossings, including across the River Welland in the south. These crossings will require small compounds on both ends of the crossing. Although locally, the size and scale of change will be large, within the scale of the LCA, a medium size and scale of change will be expected. Construction will be medium term, reversible, and of a medium geographical extent across the LCA. The magnitude of change will be **high**.

Year 1: Agricultural land use will be restored in areas above the indicative zone for underground cable assets. Although vegetation such as hedgerows and trees will be reinstated alongside other habitats, they will provide little landscape integration in year one. The scale and size of change will reduce to low. The change will be long term and reversible across a medium extent of the LCA. Overall magnitude of change will reduce to **low**.

Year 15: Agricultural land will be fully restored alongside a network of hedgerows, with replacement trees, restoring key qualities of landscape character at the baseline scenario. A discrete marker post will mark out the indicative zone for underground cable assets; otherwise, the change in the landscape will be minimal. The magnitude of change will reduce to **negligible**.

Decommissioning: All or majority of underground elements associated with the indicative zone for underground cable assets will be removed, alongside marker posts being removed, followed by restoration works. Decommissioning will result in a similar change to the construction stage es; excavation, movement of construction machinery, soil storage, and backfilling will also be required. Overall, the magnitude of change will be **high**.

Landscape effects on Landscape effects on Frampton to Fosdyke Settled Fen LCA Boston Borough Landscape Character Assessment (July 2009)
Significance
Construction: Combined medium sensitivity with a high magnitude of change will result in **major adverse and significant effects**. **Year 1:** Combined medium sensitivity with low magnitude of change will result in minor adverse and not significant effects. **Year 15:** Combined medium sensitivity with negligible magnitude of change will result in minor adverse and not significant effects. **Decommissioning:** Combined medium sensitivity with a high magnitude of change will result in **major adverse and significant effects**.

Table 2.8.B-20 – Landscape effects on Settled Fens Landscape Character Type (LCT), South Holland District Council.

Landscape effects on Settled Fens Landscape Character Type (LCT) Strategic Landscape Capacity Study for South Holland District Council (July 2003)
Sensitivity
Value: This LCT does not contain landscapes and designations, but due to its large size, it contains several Listed Buildings and some Conservation Areas, such as at Fleet Hamlet or Tydd St. Mary. Recreational opportunities are very limited, as there are very few PRoW, however Mac Milan Way Long Distance Path crosses through the LCA. The landscape is overall in intact condition. Although panoramic views are available, overhead power lines, pylons, and substations are frequently interrupted. The perception of wildness is very limited. Overall, the landscape value of this LCT is medium. **Susceptibility:** Predominantly flat topography and medium to large-scale rural landscapes are less susceptible to the proposed change. Woodland and hedgerows are of medium susceptibility, as hedgerows are present in some parts of the LCT but less frequently in others. There is a medium level of enclosure, with settlements having a robust enclosure and farmed fields of varying levels of enclosure and, therefore, of medium susceptibility. Scenic qualities are of medium susceptibility as the views are often foreshortened. The perception of wildness is limited, and the susceptibility to tranquillity is at the medium level due to the presence of a range of detracting factors, such as 440 and 132 KV overhead lines and substations alongside the light industry. The frequent presence of drains is of higher susceptibility to the proposed change. This LCA will be affected directly. The susceptibility of this LCA is medium. **Sensitivity:** Overall, the sensitivity of this LCA to the English Onshore Scheme is **medium**.
Magnitude
Construction: Construction will require clearing of field boundary vegetation that affects the LCA's existing agricultural use. Works within the indicative zone for underground cable assets will include excavation, backfilling, and temporary storage of topsoil and subsoil,

Landscape effects on Settled Fens Landscape Character Type (LCT) Strategic Landscape Capacity Study for South Holland District Council (July 2003)
as well as movement of construction vehicles along temporary and permanent access tracks. There will also be a need for compounds, including welfare facilities and material set down areas. Several areas have been identified for the trenchless crossings. These crossings will require small compounds at both ends of the crossing for a duration of work associated with the crossing. Construction will introduce uncharacteristic features that affect as well as perceptual and aesthetic qualities such as local views, tranquillity, and a sense of wildness. The size and scale of change will be large within the scale of the LCA across a medium extent of the LCA. Construction will be medium term and reversible. The magnitude of change will be **high**. **Year 1**: Agricultural land use will be restored above the indicative zone for underground cable assets. The marker posts will mark the indicative zone for underground cable assets. The planting will be restored with trees planted outside of the easement zone. Although vegetation such as hedgerows and trees will be reinstated alongside other habitats, they will provide little landscape integration in year one. The scale and size of change will be reduced to low. The change will be long term and reversible across a medium extent of the LCA. The overall magnitude of change will reduce to **medium**. **Year 15**: Agricultural land will be fully restored alongside a network of hedgerows, with replacement trees providing effective landscape integration, reflecting largely qualities of the existing landscape. The magnitude of change will reduce to **low**.
Significance
Construction: Combined medium sensitivity with a high magnitude of change will result in **major adverse and significant effects**. **Year 1:** Combined medium sensitivity with medium magnitude of change will result in moderate adverse effects and not significant effects. Although the English Onshore Scheme would affect a large part of this LCT, the existing landscape will be largely restored at year one. **Year 15:** Combined medium sensitivity with low magnitude of change will result in minor adverse and not significant effects.

Table 2.8.B-21 – Landscape effects on Walpole, Terrington and Clench Warton (D2) LCA

Landscape effects on Landscape effects on Walpole, Terrington and Clench Warton (D2) LCA Landscape Character Assessment Borough Kings Lynn & West Norfolk Borough Council (2007)
Sensitivity
Value: This LCT does not include landscape or ecological designations, but some heritage features, such as scattered Listed Buildings, are present. There are very few PRoW, and opportunities for recreation are very limited, although some recreational opportunities can be found within local settlements. The landscape is in good condition. The LCA has a high scenic value, with views available across adjacent LCAs. Cultural heritage features are represented by a historic drainage network, and the built forms of historic villages. The

Landscape effects on Landscape effects on Walpole, Terrington and Clench Warton (D2) LCA Landscape Character Assessment Borough Kings Lynn & West Norfolk Borough Council (2007)
landscape is of moderate to strong tranquillity in places but of limited wildness. Orchards are a distinct feature of this LCA. Overall, the value of the LCA is **medium**. **Susceptibility:** The lower and flat laying landform is of lower susceptibility to the proposed change. The mostly medium-scale landscape is of medium susceptibility. Vegetation cover is of generally low susceptibility, apart from more pronounced vegetation enclosure around settlements. The landscape is of medium tranquillity, disturbed in places by overhead power lines and local roads. The scenic qualities are also of medium susceptibility. This LCA will be affected directly. Overall, the susceptibility of the LCA is **medium**. **Sensitivity:** Overall, the sensitivity of this LCA to the English Onshore Scheme is **medium**.
Magnitude
The magnitude assessment for this LCA is presented in **Volume 1, Part 2, Chapter 8 Landscape and Visual Amenity**, due to considered Options for converter stations A, B, C and D.
Significance
The significance for this LCA is presented in **Volume 1, Part 2, Chapter 8 Landscape and Visual Amenity**, due to considered Options for converter stations A ,B, C and D.

Table 2.8.B-22 – Landscape effects on Emneth, West Walton and Walsoken (D4) LCA

Landscape effects on Landscape effects on Emneth, West Walton and Walsoken (D4) LCA Landscape Character Assessment Borough Kings Lynn & West Norfolk Borough Council (2007)
Sensitivity
Value: This LCA does not include landscape or ecological designations, but some Listed Buildings are scattered throughout it, and it otherwise includes a few features of heritage interest. A rich mix of farmland landscapes comprising arable fields, fruit orchards, plantations and pastures is of higher susceptibility to the proposed change. There is a limited presence of field boundary vegetation, although reeds and rushes occasionally line the local drains. There are limited recreational opportunities within this LCT. The landscape is generally of medium scale and in good condition. Although panoramic views are available, they are frequently cluttered by rows of poplars and large concentrations of fruit orchards. Tranquillity varies due to the proximity of the busy road corridor of the A47, whilst perception of wildness is limited. Overall, the landscape value is **medium**.

Landscape effects on Landscape effects on Emneth, West Walton and Walsoken (D4) LCA
Landscape Character Assessment Borough Kings Lynn & West Norfolk Borough Council (2007)

Susceptibility: The flat landform of fens is of low susceptibility to the proposed change. Generally, a small scale landscape appears of a larger scale in places due to the open character of field boundaries. There is limited woodland cover. Whilst enclosure around settlements is mixed, orchards, frequently present around settlements, increase the level of enclosure whilst reducing susceptibility to the proposed change. Susceptibility of scenic qualities is at a medium level. Perception of wildness is of low susceptibility. Although the network of drains is distinct, they are a common feature within the regional landscape and, therefore, of **medium** susceptibility. This LCA will be affected directly.

Sensitivity: Overall, this LCA is of **medium** sensitivity.

Magnitude

Construction: The construction associated with the proposed converter station and Walpole B Substation will only marginally affect this LCA as the main construction will take place within the adjacent Terrington St John LCA. Therefore, as the construction will occupy a negligible area of the LCA, there will be very little loss of the existing vegetation. The works will require access along the existing roads, such as West Drove North or Dixons Drove and the introduction of mitigation planting and temporary works associated with the temporary diversion of 4ZM (400 kV) overhead line Burwell to Walpole around the proposed Walpole B Substation. Construction works will affect a small area around two existing OHL towers, 4ZM329 and 4ZM328 located within Emneth, West Walton and Walsoken LCA. Construction, apart from a very limited direct change within the existing landscape, will affect perceptual and aesthetic qualities of the landscape within the negligible areas of LCA, such as views, tranquillity and a local sense of wildness. The size and scale of change will be very small, within the scale of the LCA. Construction will be medium term, reversible, and of a medium geographical extent within the LCA. The magnitude of change will be **medium**.

Year 1: Given the open landscape characteristics within the LCA, there will be very limited within the LCA associated with removing existing vegetation and introducing new energy infrastructure features, such as the Walpole B Substation and converter stations within adjacent LCA. Although vegetation such as hedgerows and trees will be reinstated alongside other habitats, the landscape integration effect will be limited in year one. The scale and size of change will be negligible, long-term and reversible across a medium extent of LCA. The overall magnitude of change will be medium. The magnitude of change will reduce to **low**.

Year 15: At year 15, replacement planting will restore any lost vegetation. In addition, mitigation planting will help to provide screening and landscape integration, providing a considerable degree of landscape integration to the new Walpole B Substation, local road networks, and access tracks. The size and scale of change will reduce to very small. The change will be long-term and reversible across a very small extent of the LCA. The magnitude of change will reduce to **negligible**.

Decommissioning: Decommissioning will only marginally affect this LCA apart from construction traffic and the potential need for temporary access tracks. Some loss of vegetation may occur to enable access for construction machinery and to enable off-site disposal of dismantled components of the English Onshore Scheme. At the end of decommissioning, agricultural land use will be restored with mitigation planting introduced to enable agricultural land use. The magnitude of change will be **medium**.

Landscape effects on Landscape effects on Emneth, West Walton and Walsoken (D4) LCA Landscape Character Assessment Borough Kings Lynn & West Norfolk Borough Council (2007)
Significance
Construction: Combined medium sensitivity with a medium magnitude of change will result in moderate adverse and not significant effects as construction will only marginally affect this LCA directly, and most of the impacts will be associated with indirect change. **Year 1:** Combined medium sensitivity with a low magnitude of change will result in minor adverse and not significant effects. **Year 15:** Combined medium sensitivity with negligible magnitude of change will result in minor adverse and not significant effects. **Decommissioning:** Combined medium sensitivity with a medium magnitude of change will result in moderate adverse and not significant effects as identified during the construction stage.

Table 2.8.B-23 – Landscape effects on the route corridor

Landscape effects of on the route corridor within Limits of Development
Sensitivity
Value: The Lincolnshire Wolds encroaches marginally into the indicative zone for underground cable assets near Gunby Hall. Although some ecological designations are located relatively close to the indicative zone for underground cable assets, the route has been selected to avoid ecological and heritage designations and features. The indicative zone for underground cable assets has generally medium recreational value. The physical state of individual elements and overall landscape character are generally in good condition. The scenic qualities vary across the indicative zone for underground cable assets, with picturesque and panoramic views towards the coastline available from more elevated parts of the Lincolnshire Wolds and vast and open panoramic views across the fenland landscape. The tranquillity varies and is generally at a medium level across the route. However, there are also large areas of high tranquillity with fewer areas of lower tranquillity. Wildness also varies across the indicative zone for underground cable assets and is generally at a medium level, although large areas have a low sense of wildness. There is a range of special qualities across the cable corridor, such as the coastline at the northern end of the indicative zone for underground cable assets, heritage features and frequent drains and channels within the fenland landscape. Overall, the landscape value across the indicative zone for underground cable assets route is **high**. **Susceptibility**: The landform of this LCA varies but is generally mainly flat or gently undulating, which makes it less susceptible to the proposed change. The agricultural land use is also typically less susceptible, as it can be restored at the end of construction. Woodlands are generally rare. The presence of hedgerows and hedgerow trees as field boundaries is typically at the medium level. However, large areas within the fenland landscape have very little vegetation, especially around the Wash. The scale of the agricultural landscape, linked also with openness and enclosure, is generally medium; therefore, it is of medium susceptibility to the proposed change. Distinct features are present throughout the indicative zone for underground cable assets; however, key ecological and heritage interest

features have been avoided. Scenic qualities are also of medium susceptibility as there are panoramic views, but frequently, the views are foreshortened by shelterbelts. Tranquillity is generally of medium susceptibility; however, there are large areas of higher susceptibility in contrast to wildness, which is usually of lower susceptibility across the route corridor. This LCA likely to be affected directly by the proposed change. Overall, the landscape susceptibility of route corridor is **medium**.

Sensitivity: Overall, the sensitivity of the route corridor to the English Onshore Scheme is **high**.

Magnitude

Construction: Construction will require clearance of vegetation predominantly along the field boundaries. However, the extent of the loss will be reduced to the minimum width required for the construction of the indicative zone for underground cable assets. The change to landform will be very limited as in most locations; excavation will follow with backfilling operations after cable installation and regrading with topsoil restored to enable agricultural use. As the route will require several trenchless crossings associated with drainage channels or some roads, there will be a need for a small temporary compound at both ends of the crossing necessary for the duration of works associated with the crossing. Additionally, satellite compounds will be needed along the route, including permanent compounds at Anderby Creek and Walpole B Substation and converter stations sites. Temporary haul routes will be removed at the end of construction, with permanent access tracks present at the landfill area and around converter stations and the new Walpole B Substation. Construction of converter station will require the introduction of both buildings, such as DC Hall, Valve Halls and Control Buildings, alongside other equipment, similar to the new Walpole B Substation, requiring both uncharacteristic activity and the introduction of uncharacteristic features. However, some infrastructure elements, such as the existing Walpole B Substation alongside high voltage overhead power lines, are present. The works will also include the connection of the new Walpole B Substation to the Burwell to Walpole 400 kV overhead power line. Construction will also result in increased construction traffic and the need to divert some of the PRoW. The scale and size of change will be large. Construction will be medium-term, reversible, and, to a large extent, within the scale of LCA. Overall, the magnitude of change will be **high**.

Year 1: Agricultural land use will be restored in areas above the indicative zone for underground cable assets. The size and scale of change will reduce considerably at the landfall area; however, locally, the change associated with converter stations and new Walpole B Substation will locally be of large scale and size. Replacement planting alongside proposed mitigation planting will be introduced, although it will provide little integration in year one. The overall scale and size will reduce to medium. The change will be long-term and partially reversible across multiple LCA's. The overall magnitude of change will reduce to **medium**.

Year 15: Agricultural crops will be fully restored alongside a network of hedgerows, with replacement trees providing effective screening and landscape integration. The change in landscape will still be notable in the vicinity of the converter stations and Walpole substation. Overall, the magnitude of change will reduce to low across the indicative zone for underground cable assets, although locally, such as in the proximity of the converter stations and Walpole B Substation, the magnitude of change will reduce to **low**.

Decommissioning: All or most of the underground elements associated with indicative zone for underground cable assets will be removed, alongside marker posts, followed by restoration works. Although it is highly unlikely that the new Walpole B Substation and

Landscape effects of on the route corridor within Limits of Development
converter stations will require decommissioning, buildings and electrical infrastructure can be removed offsite with agricultural land use restored. Replacement planting will also be undertaken at the end of construction. A permanent access track may be left in situ where this supports agricultural land use. The magnitude of change will be **high**.
Significance
Construction: Combined high sensitivity with a high magnitude of change will result in **major adverse and significant effects**. **Year 1:** Combined high sensitivity with a medium magnitude of change will result in **major adverse and significant effects**. **Year 15:** Combined high sensitivity with a low magnitude of change will result in moderate adverse and not significant effects as the existing landscape will be largely restored with new components of the English Onshore Scheme largely integrated within existing landscape. **Decommissioning:** Combined medium sensitivity with a high magnitude of change will result in **major adverse and significant effects**.

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