East Anglia
Offshore Wind

VATTENFALL

SCOTTISHPOWER RENEWABLES

East Anglia THREE

Appendix 29.2

Seascape, Landscape and Visual Environmental Baseline

Environmental Statement
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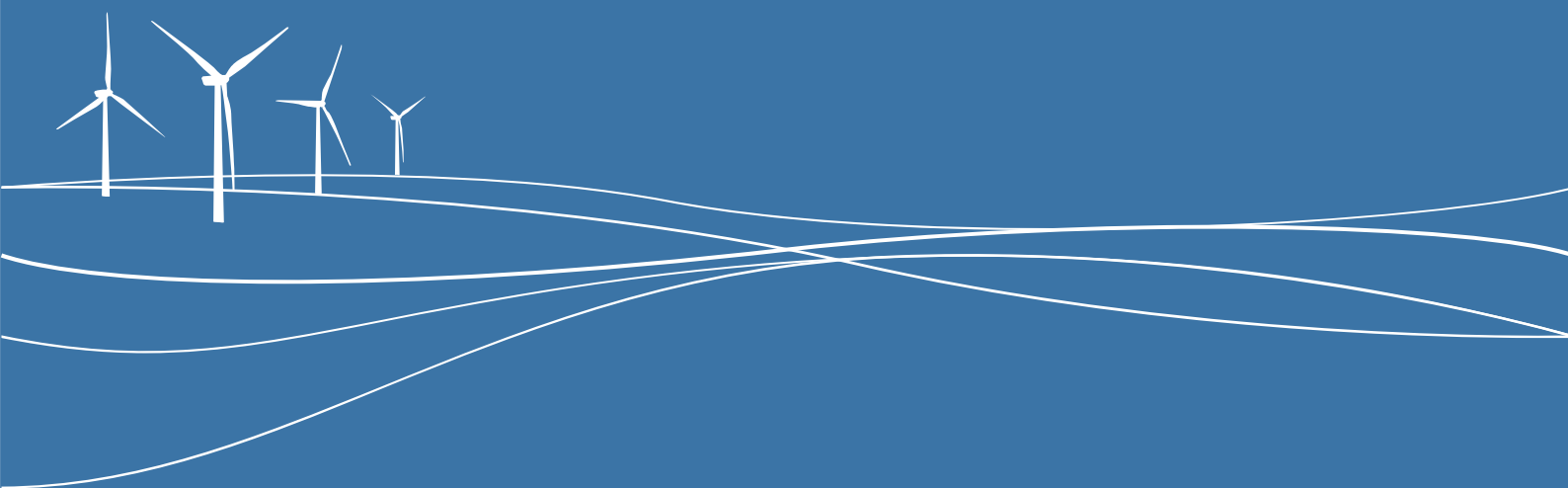

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29.2 SEASCAPE, LANDSCAPE AND VISUAL BASELINE ASSESSMENT

29.2.1 Introduction

1. This document presents the environmental baseline in terms of seascape character, landscape character and visual amenity across the relevant study areas associated with the proposed East Anglia THREE project.

2. The baseline assessment describes the environment prior to the introduction of the proposed East Anglia THREE project and provides the basis against which to assess the magnitude of change as a result of the proposed East Anglia THREE project.

3. The proposed East Anglia THREE project comprises the offshore Windfarm, the offshore and onshore cable route including the landfall location at the coast, and the substation to the west of Ipswich.

29.2.2 Offshore Baseline

4. The offshore components of the proposed East Anglia THREE project comprise wind turbines, offshore electrical platforms, meteorological masts and underwater cabling. The 100 to 172 wind turbines would be of a maximum tip height of 247m. The closest possible location a wind turbine would be located is 69km from the coastline. At this distant range, the wind turbines would not be visible from ground level along the coast owing to the curvature of the earth. From the highest point of 20m AOD on the cliff near Bawdsey, some sections of the blades of the closer wind turbines would be theoretically visible, although actual visibility would be unlikely as this would require excellent visibility conditions which occur very infrequently.

5. From coastal areas, there would potentially be views of construction vessels and cable laying vessels which would use lighting during hours of darkness as part of the construction process. The glow of construction lighting from vessels at more distant turbine sites may be visible at night. While there is an existing flow of vessels visible from the coast, the construction and cable laying vessels would add to the volume, but not to the extent that it would give rise to a significant impact on landscape or visual receptors along the coast. There is greater potential for impacts to occur from the seascape, with these impacts acting upon the seascape character as well as visual receptors on-board sea-borne vessels.

6. In terms of policy, the UK Marine Policy Statement (2011) makes reference to the definition of 'landscape' contained in the European Landscape Convention (2000), in the absence of a legal definition of seascape in the UK. It states '*In the context of this document, references to seascape should be taken as meaning landscapes with views*

of the coast or seas, and coasts and the adjacent marine environment with cultural, historical and archaeological links with each other.'

7. The UK Marine Policy Statement identifies the scope of the Marine Plans in terms of the considerations that would be required;

8. '*When developing Marine Plans, marine plan authorities should consider at a strategic level visual, cultural, historical and archaeological impacts not just for those coastal areas that are particularly important for seascape, but for all coastal areas, liaising with terrestrial planning authorities as necessary.*'

9. The Draft East Inshore and East Offshore Marine Plans (2014) have been prepared in response to the UK Marine Policy Statement and present a series of objectives aimed at balancing economic development against environmental protection. '*Objective 5 – To conserve heritage assets, nationally protected landscapes and ensure that decisions consider the seascape of the local area'* ensures that it is not only the coastal landscapes that are considered, but also the inshore area out to approximately 12 nautical miles and the offshore area out to the international maritime border with the Netherlands, Belgium and France.

10. The East Inshore and Offshore Character Areas identified in the Marine Plans that are of relevance to the LVIA for the proposed East Anglia THREE project are the Suffolk Coastal Waters (inshore) and the East Anglian Shipping Waters (offshore). Specific information with regard to the character of these areas is presented in the 'Seascape Characterisation around the English Coast' (Marine Plan Areas 3 and 4 and Part of Area 6 Pilot Study) (2012).

11. In terms of seascape character, the inshore and offshore areas are described in the Seascape Characterisation citation in terms of 'Key Characteristics', 'Physical Influences', 'Cultural Influences' and 'Aesthetic and Perceptual Responses'. For the inshore area of the 'Suffolk Coastal Waters' the citation refers to the coastal features as the principal influence on the seascape character, with comparatively little reference to the seascape features.

- *'Suffolk Coast and Heaths AONB and Heritage coast designations recognise a rich mixture of unique and vulnerable coastal lowland landscapes;*
- *Low-lying coastline dominated by coastal processes and estuarine influences;*
- *Unified coastal interface with a nationally significant concentration of vegetated shingle structures and coastal lagoon habitats;*
- *Colourful seafront coastlines lined by brightly painted beach huts;*

- *Steeply sloping shelved shingle beaches;*
- *Prolific wildlife value, particularly bird life;*
- *Dramatic and contrasting developments such as Sizewell nuclear power station, Orfordness transmitting station and commercial dock development at Felixstowe;*
- *Historically heavily defended coastline;*
- *Large scale panoramic views of the seascape dominated by busy offshore North Sea shipping waters;*
- *Perception of seascape is often from the immediate coastal interface due to long estuaries, low landform and coastal shingle structures.'*

12. In respect of the extent of the seascape area, the influence of these coastal features would reduce with distance, such that there would be very little influence out at the boundary. The offshore components would be located a distance of 47km from the outer boundary of the inshore area, such that, despite their large scale, they would appear as relatively small scale elements and their influence on the character of the seascape would be limited.

13. The citation for the offshore 'East Anglian Shipping Waters' describes the seascape as a unified and expansive area of open water with few surface features, other than 'dense concentration of shipping activity' and the additional influence of offshore wind farms, gas fields and areas used for military practice, fishing and dredging. With the absence of any special seascape features and the presence of many human interventions, the sensitivity of this area to the proposed East Anglia THREE project would be low.

29.2.3 Onshore Baseline – Study Area Overview

14. The study area comprises a 4km radius around the substation and a 1km strip along the 37km onshore cable route (500m either side) with expanded sections around access tracks, Construction Consolidation Sites and the landfall location.

15. The proposed East Anglia THREE project is located in Suffolk in the southern part of East Anglia. The offshore Windfarm lies approximately 69km off the North Sea coast, with the landfall location for the offshore cable route located south of Bawdsey. The onshore cable route crosses the River Deben and Martlehsam Creek, and through the surrounding agricultural landscape to wrap around the northern side of Ipswich. It ends at the substation, located next to the existing sub-station at Bramford.

16. The character of the study area is influenced by the transition from the coastal landscape to the interior landscape, and while the majority of the area is typified by rural agricultural farmland, there are also influences from urban areas and rural developments.

29.2.4 Onshore Baseline – Landscape Character

29.2.4.1 National Designations - Areas of Outstanding Natural Beauty (AONB)

17. AONBs are landscapes that have been recognised as being of national importance. They are protected through legislation which places the specific duty on local authorities to produce a Management Plan and places responsibility on all 'relevant authorities' in the area to conserve and enhance the natural beauty of the designated area.

18. The Management Plan for the Suffolk Coast & Heaths AONB is created through a Joint Advisory Committee. The implementation of the Management Plan is achieved through the Suffolk Coast & Heaths AONB Partnership which is made up of organisations with a particular interest in the AONB and is co-ordinated by a core team.

19. The Suffolk Coast & Heaths AONB extends approximately 60 kilometres along the coast of Suffolk from the Stour estuary in the south to Kessingland in the north. It is a low-lying coastal area including shingle beaches, crumbling cliffs, marshes, estuaries, heathland, forests and farmland. The AONB contains the few remaining fragments of Sandlings Heath and some of the least developed coastline in southern England. The countryside, towns and villages in the AONB have an unspoilt and tranquil atmosphere, and a distinctive character.

20. The part of the study area subject to the Suffolk Coast and Heaths AONB is the eastern part which extends from Bawdsey, on the coast, to Woodbridge where Martlesham Creek meets the River Deben. While the AONB predates the Suffolk Landscape Character Assessment, the special qualities of the AONB are based on the LCTs which occur in the area. The route passes through five of the eight LCTs which make up the AONB, of which four are agricultural landscapes, with the Saltmarsh and Intertidal Flats LCT being the only largely unmodified landscape.

21. At the coast, the landfall and initial section of the onshore cable route lie within an area of Rolling Estate Farmlands LCT, before passing into the Coastal Levels LCT, and then passing through a very narrow band of Saltmarsh and Intertidal Flats LCT, prior to crossing the River Deben. On the opposite bank, the route passes again through the Coastal Levels LCT and then a mix of different agricultural landscapes where

subtle variations in character occur as a result of the changing topography and extent of enclosure afforded by mature tree cover and hedgerows.

22. Beyond the crossing of the River Deben, the onshore cable route lies on the western edge of the AONB where the influence of the Saltmarshes and Intertidal Flats LCT is not readily evident and the character of the landscape is largely influenced by the agricultural land uses. With the exception of small sections of Saltmarshes and Intertidal Flats and Valley Meadowlands LCTs, the location of the onshore cable route would be through an agricultural landscape where the extent of mature tree cover and hedgerows combined with the subtle variations in landform add to the rural identity.

23. The Management Plan states that *'The unique quality of the Suffolk Coast & Heaths AONB is defined by the rich mosaic of landscape types in a relatively small area. Coast, estuaries, heath, forest, farmland and coastal market towns together create an intimate pattern, an important part of Britain's natural and cultural heritage. Other less tangible features, such as its tranquillity, lack of significant congestion and light pollution, and its relatively undeveloped nature, contribute to the special character of the area.'* There are 8 landscape character types within the AONB, these are listed in the table below and their special qualities are outlined. Those LCTs which feature in the study area of the landfall location and onshore cable route are highlighted in grey.

Landscape Character Type	Special Qualities
Sand dunes and shingle ridges	• Shingle features, some vegetated, notably Orford Ness; • Short sections of crumbling soft cliffs – Dunwich, Covehithe, their landscape prominence and associated biodiversity and geodiversity through exposure of geological strata; • Bodies of water (broads/saline lagoons) – Shingle Street, Benacre; • Sense of space, isolation and tranquillity, long-distance walking routes; • Coastal towns and villages – Aldeburgh, Southwold, Walberswick, Dunwich; • Beach huts and fishermen's huts; • Distinctive built heritage in the landscape such as Martello towers and Cold War buildings on Orford Ness, which add a sense of history to the landscape; • The iconic resort of Thorpeness, built as a bespoke holiday village in the early 1900s; and • Havergate Island in the Ore estuary, Suffolk's only island.
Saltmarsh and intertidal flats	• Extensive areas of saltmarsh and mudflats; • Navigation opportunities for small boats; • Numerous boats on swinging moorings provide an attractive

	feature in the landscape; • Open and extensive views; • Specialist wildlife; and • Walking where estuary-side paths exist.
Coastal levels	• Extensive wet, grazing marshes; • Large reedbeds; • Ancient drainage and enclosure patterns; • Open and extensive views; • Specialist wildlife; and • Freshwater sources (well-points and reservoirs).
Open coastal and wooded fens	• Large reedbeds, with a strong sense of tranquillity; • Flat open landscapes; • An undeveloped nature to these areas; and • Freshwater habitats especially reedbeds and their associated wildlife.
Valley meadowlands	• Small-scale undeveloped landscapes; and • Freshwater habitats especially.
Estate sandlands and rolling estate sandlands	• Rare lowland heath and its associated wildlife; • Large skies, open vistas across heath/wooded mosaics; • Distinctive field patterns and elm and pine hedges; • Coniferous forest meeting multiple needs and a few iconic ancient woods; • Good walking, cycling and riding opportunities; • Glorious colour of red crag pits; and • Natural, unspoilt cliffs and beaches.
Estate farmlands	• Spring cereal crops and their important wildlife; • Large open views from the uplands down to the Orwell and Stour estuaries; • Ancient woodlands, distinctive field patterns and designed parkland landscapes with ancient trees; and • A particularly quiet and undisturbed part of the AONB (and project area).
Seascape	• There is currently no description of the seascape character or special qualities for the Suffolk Coast.

29.2.4.2 Local Designations – Special Landscape Areas (SLA)

24. SLAs are landscapes that are designated for their local importance. Saved Policy CL2 from the Mid Suffolk Local Plan (1998) states *'Within Special Landscape Areas, particular care will be taken to safeguard landscape quality, and where development does occur it should be sensitively designed, with high standards of layout, material and landscaping.'* With specific reference to utility installations and power lines, there is an expectation that these should be routed away from SLAs to avoid visual intrusion. Suffolk Coastal District Policy AP21, also states that: *'In the Area of Outstanding Natural Beauty and Special Landscape Areas the form of buildings, choice of materials, and colours must be sympathetic to the general character of the area and seek to reduce visual impact.'*

25. Mid Suffolk Core Strategy states in Paragraph 3.18: *'The Landscape Character Assessment does not replace the Special Landscape Area local designations. These*

designations will form part of the Development Control Policies DPD and will remain adopted until superseded by a level 3 Landscape Character Assessment of the District.' The level 3 Landscape Character Assessment was not available for areas within the study area at the time of writing. SLAs are shown in Figure 29.2, and referenced in the baseline descriptions in this Appendix and in the assessment in Chapter 29. The East Anglia THREE onshore cable route passes through areas designated as SLA, while the East Anglia THREE substation lies outwith the SLA designation.

29.2.4.3 Heritage Coast

26. Heritage Coasts are 'defined' rather than designated areas and form part of a national network around England. Their purpose is to:

- Conserve, protect and enhance the natural beauty of the coasts, their marine flora and fauna, and their heritage features.
- Facilitate and enhance their enjoyment, understanding and appreciation by the public.
- Maintain and improve the health of inshore waters affecting Heritage Coasts and their beaches through appropriate environmental management measures.
- Take account of the needs of agriculture, forestry and fishing, and of the economic and social needs of the small communities on these coasts.

27. Natural England describe the Suffolk Heritage Coast as: '*… a secret coastline of reed-fringed creeks, tidal marsh and low, heath-backed cliffs. Its changing faces make this a discreet but distinctive landscape*.' It runs from Kessingland to Felixstowe and incorporates the Blyth, Alde/Ore and lower Deben estuaries. It is contained mainly within the Suffolk Coast & Heaths AONB.

29.2.4.4 National Landscape Character

28. National Character Areas (NCAs); previously known as Joint Character Areas (JCAs) were originally identified by the Countryside Agency who mapped 159 areas of landscape character across England. This mapping, often referred to as 'The Character of England', and the associated descriptions have been revised and developed by Natural England into National Character Area Profiles and provide a picture of the differences in landscape character at the national scale. It is considered that whilst the NCAs provide a recognised, national, spatial framework the scale of the mapping and information makes it of limited use as a planning tool.

It provides a useful overview of the landscape within the area and a context for more detailed Landscape Character Assessments.

29. The study area for the onshore cable route is located within the Suffolk Coast and Heaths NCA (NCA 82) to the far east of the proposed East Anglia THREE project, and the South Suffolk and North Essex Clayland NCA (NCA 86) for the rest of the Development Area. This is shown in Figure 29.3.

30. *'The Suffolk Coast and Heaths NCA lies on the North Sea coast between Great Yarmouth in the north and the port town of Harwich in the south, forming a long, narrow band that extends between 10 and 20 km inland. Its inland western boundary is with the South Norfolk and High Suffolk Claylands and South Suffolk and North Essex Claylands NCAs, with projections up many small river valleys.'*

31. The Suffolk Coast and Heaths landform is described as '*mainly flat or gently rolling, often open but with few commanding viewpoints*'. The Suffolk Coast & Heaths AONB is contained within the NCA. The area is a combination of heathland and agricultural land - much of which has been reclaimed from the heathland. Woodland has also been planted on the former heathland. This forms a mosaic of natural and semi natural landscape features. The coast is interrupted by five estuaries; Stour, Orwell, Deben, Alde/Ore and Blyth, with extensive intertidal areas of mudflat and salt marsh, adding to the areas biodiversity and ecological value.

32. The South Suffolk and North Essex Clayland NCA covers the four counties of Suffolk, Essex, Hertfordshire and Cambridgeshire. The NCA Profile describes the area as:

33. *'… an ancient landscape of wooded arable countryside with a distinct sense of enclosure. The overall character is of a gently undulating, chalky boulder clay plateau, the undulations being caused by the numerous small-scale river valleys that dissect the plateau. There is a complex network of old species-rich hedgerows, ancient woods and parklands, meadows with streams and rivers that flow eastwards. Traditional irregular field patterns are still discernable over much of the area, despite field enlargements in the second half of the 20th century.*

34. *Farming, predominantly for arable crops, utilises 84 per cent of the land area, supported by the moderately fertile soils and equable climate…. The area's rich archaeology provides evidence of a long history of settlement and significant past wealth and importance, including Palaeolithic finds, Roman sites, medieval monasteries and castles, isolated moated farmsteads, barns and a number of large country houses.'*

29.2.4.5 Local Landscape Character

35. The Suffolk Landscape Character Assessment has been produced by Suffolk County Council and is available on their web-site. Using the NCAs as a baseline, it further refines the broad NCAs within the Suffolk County boundaries into 31 distinctive Landscape Character Types (LCT). Each LCT is defined in detail and further sub-divided into 'units' in instances where the same LCT is identified in separate geographical locations.

36. LCT and LCT units provide a more detailed description of the landscape character within the immediate area of the proposed East Anglia THREE project and indicate the features likely to be affected or crossed by the onshore cable route and substation.

29.2.4.6 Onshore Cable Route

37. To assist in the management of the onshore cable route assessment, the route has been broken down into a number of individual sections so that a particular focus can be achieved on the resulting outcome of landscape and visual impacts. These sections are based on references given to crossing points of particular features such as roads (RDX) or rivers (RVX). There are nine sections in total and these are described in the following sections.

29.2.4.7 Local Landscape Character

38. In general terms, the landscape around the proposed East Anglia THREE project is predominantly farmed agricultural land. Large open fields feature extensively along the route, many used for arable crops. Field boundaries are often hedgerows, occasionally with hedgerow trees and intermittent woodlands or woodland shelterbelts. The gently undulating agricultural landscape continues for the majority of the study area with subtle changes occurring between landscape character types, which mostly relate to variations in the relief and extent of enclosure. It is accepted that the boundaries of each of these LCTs, while clearly defined on plan, would not be so readily apparent on the ground, where characteristics of adjoining LCTs are likely to be present.

39. A noticeable change in character does occur where there is a change from large scale agricultural farmland to more intimate narrow valleys. In these areas, the open fields are replaced with smaller scale fields consisting of rough grassland and native scrub woodland in places.

40. The character of the landscape also changes as the route passes through the coastal levels at either side of the River Deben. Here the landscape is flat and open. There are long range views across the landscape and the river estuary, with a strong influence from the large expansive sky.

41. It is unlikely, given the geographical extent of the LCTs, that the landfall location, onshore cable route and substation study areas will occupy large areas within the LCTs. The baseline study, therefore, identifies the overall characteristics of the LCTs as described in the Suffolk County Council web-site and then further describes the characteristics and elements that are contained within the study area for each section of the onshore cable route and the substation, which comprises a1km strip along the onshore cable route and 4km radius around the substation.

29.2.4.8 Section 1 - Landfall Location and Onshore Cable Route to RDX 01

42. The landscape at the landfall location within the study area falls within a unit of the Rolling Estate Sandlands LCT. The key characteristics of this landscape character type are described as:

- *Rolling river terraces and coastal slopes*
- *Sandy and free draining soils with areas of heathland*
- *Late enclosure with a pattern of tree belts and straight hedges*
- *Landscape parklands*
- *A focus of settlement in the Estate Sandlands landscape*
- *19thC red brick buildings with black glazed pantiles*
- *Tree belts and plantations throughout*
- *Occasional and significant semi-natural woodlands and ribbons of wet woodland*
- *Complex and intimate landscape on valley sides*

43. This LCT unit covers a large geographical area with both coastal, riverside and inland features. The study area around the landfall location constitutes a localised area along a 2km stretch of coastline.

44. The features of the LCT within the study area include an area of sandy beach and a coastal slope which increases in height from approximately 5m AOD to the northern point of the coastline within study area to approximately 25m AOD at the south-west of the study area where it is referred to as Bawdsey Cliff on OS maps. Adjoining the coastal slope inland are medium scale agricultural fields which are bounded by tall hedgerows with mature trees beyond which there is a minor road. An area of mixed woodland shelterbelt planting also adjoins Bawdsey Cliff and provides screening for a disused MOD base (RAF Bawdsey) to the south-west of the study area. Other settlement within this area includes scattered rural dwellings and

farmsteads along the minor road. Settlement increases to the north of the study area which borders the village of Bawdsey. There are further parking and visitor facilities along the coast just beyond the study area which provide access to the long distance Suffolk Coast Path and to the historic Martello towers which dot this section of coast.

45. Natural coastal processes are a feature of the coastline within the study area where the cliff has recently been subject to erosion. This has created an edge of exposed bare earth where the cliff has fallen away. A concrete 'pillbox' lookout structure has also partially slid down the eroded landfall face. Farm fields abut hard onto the cliff edge leaving only a narrow strip for the Suffolk Coast Path.

29.2.4.8.1 Sensitivity of landscape receptors

46. The LCT unit and study area are situated within the Suffolk Coast & Heaths AONB and also within the Suffolk Heritage Coast description. While the agricultural landscape, which encroaches tight onto the cliffs, reduces the scenic quality of the Rolling Estate Sandlands LCT, the designations combined with the scenic qualities of the coastal landscape give an assessed value rating of medium to high. Susceptibility to change from the proposed East Anglia THREE project is considered to be medium owing to the potentially localised impacts and the capacity to restore the landscape elements, albeit in a landscape where visibility is often open. The overall sensitivity of the Rolling Estate Sandlands LCT to the proposed East Anglia THREE project within the study area is, therefore, considered to be **medium to high**.

29.2.4.8.2 Sensitivity of visual receptors

47. Within this landfall section, the Suffolk Coast Path is routed along the shingle levels of the beach from the ferry crossing to the west of Bawdsey Manor, turning inland along a track between field boundaries to Ferry Road. The Suffolk Coast Path follows Ferry Road towards Bawdsey village within the study area where it turns back towards the coast along a minor road. At the time of assessment, the section of the route around the landfall location was closed due to erosion. However it has been assumed that it will be reinstated and is assessed as existing.

48. The main users of the Suffolk Coast Path are likely to be recreational walkers. Road users along Ferry Road will also experience the part of the route that coincides with the road.

49. The view along this section of the Suffolk Coast Path is not identified as a valued view on OS maps. The main focus of views along this section of the Suffolk Coast Path is the expansive seascape and views along the coastline, particularly to the north-east where the historic Martello towers create distinctive point features. Away from the cliffs, the landscape quickly assumes an agricultural character and it is

difficult to discern a coastal edge from Ferry Road and the PRoW. Hedges and hedgerow trees along the track and Ferry Road filter and enclose views such that the agricultural character prevails. Overall, the value of the views of walkers on the Suffolk Coast Path is assessed as medium to high.

50. The susceptibility of walkers on the Suffolk Coast Path is typically medium to high owing to the awareness of their surroundings combined with the length of time they will be exposed to views. In respect of this particular context, the experience of walkers is already influenced by the modified extent of the agricultural landscape in contrast to the comparatively less modified extent of the coast. Development is already seen to encroach onto the coastline and erosion detracts from the scenic quality of the coastal views.

51. The combination of the medium to high value of the view and the medium to high susceptibility leads to a **medium to high** sensitivity for walkers on the Suffolk Coast Path.

52. While Ferry Road is located in the AONB, there are no recognised viewpoints associated with this section of the route and the extent of views is largely contained by the surrounding hedgerows. The value of road-users' views is therefore medium.

53. The susceptibility of the road-users is limited by the brief opening which allows a view in this direction. Travelling at speeds, typically in excess of 30mph, the view will be experienced for only a short duration. Because of its perpendicular angle to that of the road, it will be apparent to westbound road-users and not readily apparent to eastbound road users. The susceptibility of road-users will be medium.

54. The combination of the medium value of the views and the medium susceptibility of road-users leads to an overall medium sensitivity for road-users on Ferry Road.

29.2.4.9 Section 2 - Road Crossing RDX01 to RDX02

55. In this section of the route the onshore cable route passes through the flat landscape flanking the River Deben and beneath the river itself. There are 4 LCTs within this section of the route:

- LCT 06 - Coastal Levels;
- LCT 11 – Plateau Estate Farmlands;
- LCT 16 – Rolling Estate Sandlands; and
- LCT 20 – Saltmarsh and Intertidal Flats.

56. The key characteristics of the Rolling Estate Sandlands LCT are described above in Section 29.4.8. The Coastal Levels LCT occur at each side of the River Deben and are described as:

Flat coastal grazing land reclaimed from saltmarsh, behind sea and river walls

- *Flat marshland adjacent to the coast or estuaries*
- *Marine alluvium soils*
- *Sinuous and complex mediaeval dyke networks*
- *Uniform 19th century dyke networks*
- *Cattle-grazed wet grassland*
- *Widespread modification for arable production*
- *Small plantations and carr woodlands*
- *Inland side of rising ground often wooded*
- *Important wildlife conservation areas*
- *Unsettled landscape with domestic buildings on the fringes*
- *Derelict wind pumps*

57. The Plateau Estate Farmlands LCT introduce a subtle change in landscape to the Rolling Estate Sandlands LCT which occur at the fringes of the Plateau Estate Farmlands within the study area. The Plateau Estate Farmlands LCT are described as:

58. *A landscape of large regular fields with small woodlands on light loamy soils*

- *Flat landscape of light loams and sandy soils*
- *Large scale rectilinear field pattern*
- *Network of tree belts and coverts*
- *Large areas of enclosed former heathland*
- *18th- 19th & 20th century landscape parks*
- *Clustered villages with a scattering of farmsteads around them*
- *Former airfields*

- *Vernacular architecture is often 19th century estate type of brick and tile*

59. The Saltmarsh and Intertidal Flats occur along the edges of the River Deben between the Coastal Levels and the water edge as shown in Figure 29.3. The key characteristics of the Saltmarsh and Intertidal Flats LCT are described as:

    Marine alluvium and some outcrops of clay, forming mud flats

- *Inter-tidal flats dissected by creeks*
- *A few small areas of saltmarsh*
- *Wild unimproved land*
- *Unsettled landscape*
- *Powerful sense of isolation and wildness*
- *Integral to the setting of notable features*
- *Suffering from coastal squeeze and the associated erosion*

60. The onshore cable route in this section passes through approximately 4km of the Coastal Levels LCT and approximately 2.5km of Rolling Estate Farmlands LCT where it adjoins the Coastal Levels LCT at either side of the river. The Saltmarsh and Intertidal Flats are traversed for a short distance at either side of the river. This is illustrated in Figure 29.4a.

61. The landscape is low-lying, predominantly flat and open. The sense of openness increases with proximity to the River Deben owing to the limited occurrence of hedgerow enclosure and this produces a large scale and expansive feel to the landscape. In contrast, a sense of enclosure increases inland from the Coastal Flats, signifying the change in character to Rolling Estate Farmlands. Hedgerows and shelterbelt woodlands begin to feature in the more rolling landscape and filter long range views, although the landscape is still predominantly open.

62. The landscape is mainly agricultural. Along the Coastal Flats, arable fields have been reclaimed from marshland through the use of complex mediaeval and more uniform 19th Century dyke networks. In the more elevated parts of the Rolling Estate Sandlands, the large agricultural fields are bounded by hedgerows and trees, and interspersed intermittent shelterbelt planting.

63. Typical of the Coastal Levels LCT, settlement within this section is very sparse. Where settlement occurs it is within the more elevated Rolling Estate Sandlands LCT

where farmsteads and rural dwellings are scattered across the agricultural landscape.

64. Footpaths and tracks provide access in the Coastal Levels, while within the Rolling Estate Sandlands access is enhanced through the presence of minor roads. Sailing vessels are also a common form of transport and recreational activity along the River Deben, where they introduce movement in an otherwise remote and tranquil landscape.

29.2.4.9.1 Sensitivity of landscape receptors

65. This section of the onshore cable route is situated to the eastern edge of the Suffolk Coast & Heaths AONB and forms part of the Heritage Coast. Although the landscape is mainly agricultural and influenced by human activity, historic elements such as mediaeval field formations and natural formations such as the River Deben combined with a sense of openness and tranquillity give the area a medium to high rating for value. Susceptibility to change from the proposed East Anglia THREE project is considered to be medium owing to the potentially localised impacts and the capacity to restore the landscape character, especially in the reclaimed Coastal Levels of the River Deben where there is little enclosure. The overall sensitivity of the Rolling Estate Sandlands LCT, Plateau Estate Farmlands LCT and Coastal Levels LCT to the proposed East Anglia THREE project is **medium to high**.

66. The Saltmarsh and Intertidal Flats LCT has a medium to high value rating due to its wild and unsettled nature and its role in the setting of other features. Its fragile nature due to coastal squeeze and erosion give it a medium susceptibility to change, particularly during the construction phase and an overall sensitivity of **medium to high.**

29.2.4.9.2 Sensitivity of visual receptors

67. Footpaths, bridleways and minor roads occur mainly to the west of the River Deben. Across the reclaimed marshland to the east of the River Deben there are no PROWs. Other visual receptors within this section of the onshore cable route include the River Deben itself which is used for recreational activities by users of sailing and other water-borne vessels. Small settlements of Kirton and Falkenham are situated on the edge of the study area and will experience few visual impacts as a result of the proposed East Anglia THREE project.

68. Public footpaths and bridleways within the study area are generally situated along field boundaries and have open views across the agricultural landscape. There is a mixture of open fields, fields bounded by fragmented hedgerows with large gaps in places and fields with full hedgerows. Mature trees and tall hedgerows restrict or filter views in places. Where the landscape slopes towards the River Deben, there

are extensive views over the adjacent marshland, but generally views are contained within the rolling landscape. The footpaths link the settlements of Kirton and Falkenham to other areas of settlement in the area and to the River Deben.

69. Recreational users of PROWs are assessed as having a medium susceptibility to change from the proposed East Anglia THREE project. The views, although in an AONB and over the River Deben, are mainly over agricultural fields and are incidental views and not views that are formally recognised for their scenic value. Therefore, the value of the views are assessed as medium. The overall sensitivity of users of the PROWs to the proposed East Anglia THREE project is **medium**.

70. Users of sailing and other water-borne vessels on the River Deben will experience views over the surrounding marshland flats and more distant views of the rising valley sides. The main focus of the view is likely to be along the River Deben and the areas of navigation. The onshore cable route will be passed beneath the River Deben using HDD and will have little visible impact on the River or the marshlands. Any impacts on the loss of field boundaries in the expansive, open vista from the river will appear minor in the overall view. Susceptibility to change from the proposed East Anglia THREE project is considered to be medium to low for users of sailing and other water-borne vessels on the River Deben. The value of the views is assessed as medium to high. The overall sensitivity of viewers on water-borne vessels on the River Deben to the proposed East Anglia THREE project is considered to be **medium**.

29.2.4.10 Section 3 - Road Crossing RDX02 to RDX03

71. In this section the onshore cable route passes through a flat, slightly elevated agricultural landscape before dipping into a subtle valley landscape as it travels north parallel to the River Deben. There are 4 LCTs within this section of the route:

- LCT 07 – Estate Sandlands;
- LCT 11 – Plateau Estate Farmlands;
- LCT 16 – Rolling Estate Sandlands; and,
- LCT 26 – Valley Meadowlands;

72. The key characteristics of the Rolling Estate Sandlands LCT and Plateau Estate Farmlands LCT are described above in sections 29.3.8 and 29.3.9. The Estate Sandlands introduce a subtle change in landscape to the Rolling Estate Sandlands which occur at the fringes of the Estate Sandlands within the study area. The Estate Sandlands are described as:

73. *A landscape of large geometric fields, plantation woodlands and remnant heathland*

- *Flat or very gently rolling plateaux of free-draining sandy soils, overlying drift deposits of either glacial or fluvial origin*
- *Chalky in parts of the Brecks, but uniformly acid and sandy in the south-east*
- *Absence of watercourses*
- *Extensive areas of heathland or acid grassland*
- *Strongly geometric structure of fields enclosed in the 18th & 19th century.*
- *Large continuous blocks of commercial forestry*
- *Characteristic 'pine lines' especially, but not solely, in the Brecks*
- *Widespread planting of tree belts and rectilinear plantations*
- *Generally a landscape without ancient woodland, but there are some isolated and very significant exceptions*
- *High incidence of relatively late, estate type, brick buildings*
- *North-west slate roofs with white or yellow bricks. Flint is also widely used as a walling material*
- *On the coast red brick with pan-tiled roofs, often black-glazed*

74. Valley Meadowlands LCT occurs as the landscape dips into a valley formed around the Kirton Creek, a tributary to the River Deben. It is described as:

Flat valley floor grasslands on silty and peat soils

- *Flat landscapes of alluvium or peat on valley floors*
- *Grassland divided by a network of wet ditches*
- *Occasional carr woodland and plantations of poplar*
- *Occasional small reedbeds*
- *Unsettled*
- *Cattle grazed fields*
- *Fields converted to arable production*

75. The onshore cable route in this section passes through approximately 1km of the Plateau Estate Farmlands LCT and approximately 0.3km of Rolling Estate Farmlands LCT where it adjoins the Valley Meadowlands LCT. The route traverses the Valley Meadowlands LCT which is approximately 0.5km in width at this point. This is illustrated in Figure 29.4a.

76. The landscape of the Plateau Estate Farmlands consists of a flat topography with large rectilinear fields consolidated from smaller fields through the removal of hedgerows. In common with the adjoining Rolling Estate Farmlands, field boundaries consist of hedgerows with occasional trees. As the onshore cable route heads north, the flat, elevated plateau changes to an undulating topography which drops towards the more intimate landscape of the Kirton Creek valley.

77. In contrast to the rectilinear field structure, the Valley Meadowlands has a more informal landscape pattern, with flat wetland pasture formed from the use of wet ditches, within the sinuous curves of the valley sides and the meandering creek. Carr woodland plantations and native woodlands follow the upper edge of the valley, accentuating the informal curves and increasing the sense of intimacy within the low lying wetland valley.

78. The largest settlement in the area is Kirton, which is a small village on the flat plateau landscape. Elsewhere there are scattered farmsteads and rural dwellings.

79. Access in the area is mainly through a network of minor roads, tracks and footpaths. While light traffic flows on the minor roads and activity of farm machinery in the open fields provides a dynamic element, a sense of remoteness and tranquillity is experienced within the Kirton Creek valley, where views along the valley connect the viewer to the undeveloped marshy reed beds and the River Deben beyond.

29.2.4.10.1 Sensitivity of landscape receptors

80. This section of the onshore cable route is situated to the eastern edge of the Suffolk Coast & Heaths AONB. The Kirton valley is also designated as a Special Landscape Area (SLA) which denotes its local importance. The landscape in this section is mainly agricultural and influenced by human activity. However the predominantly rural location and the sense of tranquillity in the Kirton Creek valley, contribute to the value of the landscape which is assessed as medium to high. Susceptibility to change from the proposed East Anglia THREE project is considered to be medium owing to the potentially localised impacts and the capacity to restore the landscape character. The overall sensitivity to the proposed East Anglia THREE project is considered to be **medium to high**.

29.2.4.10.2 Sensitivity of visual receptors

81. Footpaths, bridleways, a National Cycle Route and minor roads occur along this section of the route. The small settlements of Kirton and Newbourne, which are situated on the western edge of the study area, will experience few visual impacts as a result of the proposed East Anglia THREE project, due to distance and intervening trees, hedgerows and other landscape features.

82. Public footpaths and bridleways within the study area are generally situated along field boundaries on the elevated ground to the north and south of the Kirton Creek valley and have views across the agricultural landscape. There are a mixture of fields bounded by fragmented hedgerows with gaps in places and fields with full hedgerows. Mature trees and tall hedgerows restrict or filter views in places. Generally views are contained within the rolling farmed landscape, with mature trees and tall hedgerows restricting or filtering views in places. The footpaths link the settlements of Kirton, Newbourne and rural dwellings to other areas of settlement in the area, and to the River Deben.

83. Recreational users of footpaths and bridleways are assessed as having a medium susceptibility to change from the proposed East Anglia THREE project. The views, although in an AONB, are mainly over agricultural fields, and are incidental views and not views that are formally recognised for their scenic value. Therefore the value of the views is assessed as medium. The overall sensitivity of users of the footpaths and bridleways to the proposed East Anglia THREE project is considered to be **medium**.

84. The onshore cable route traverses two minor roads within this section; Park Lane and Hemley minor road. From both these roads, there are open views across the agricultural landscape with occasional trees situated at the road-side but no field boundaries at the points of the proposed crossing. Susceptibility to change from the proposed East Anglia THREE project is considered to be medium to low for road users along the minor road as there will be no disruption of hedgerows adjacent to the road. The views, although in an AONB, are mainly over agricultural fields and are incidental views and not views that are formally recognised for their scenic value. Therefore the value of the views is assessed as medium. The overall sensitivity of road users to the proposed East Anglia THREE project is considered to be **medium**.

29.2.4.11 Section 4 - Road Crossing RDX03 to RVX 03 (Martelsham Creek)

85. In this section the onshore cable route passes through the flat plateau of the agricultural landscape before crossing a small area of coastal flat adjacent to the River Deben. There are 2 LCTs within this section of the route:

- LCT 07 – Estate Sandlands; and

- LCT 16 – Rolling Estate Sandlands.

86. The key characteristics of the Estate Sandlands and Rolling Estate Sandlands are described above in sections 29.3.8 and 29.3.10 respectively.

87. The onshore cable route in this section passes through intermittent areas of Rolling Estate Sandlands totalling approximately 2km. The route passes through approximately 5km of Estate Sandlands which constitutes the main landscape character type within this section of the route. This is illustrated in Figure 29.4b.

88. The landform within this section is flat with very gentle undulations. Large scale, rectilinear fields with mature, tall hedgerows and hedgerow trees, are a common feature and reduce the distinction with the Rolling Estate Sandlands and Estate Sandlands. A common feature to both is also the presence of tree belts, although the presence of coniferous woodlands is more a feature of the Estate Sandlands. Bare earth is a frequent seasonal feature of the ploughed fields. With the exception of the Martelsham Creek, the absence of watercourses within the study area concurs with the Estate Sandlands description.

89. Settlement in the area is focused on two main clusters of housing; one at Walderingfield and the other at Newbourne. Outside of these small settlements are a few scattered farm dwellings. Other man made features in the landscape are clustered in the north of this section of the route around Waldringfield and include Waldringfield Heath Golf Course, a static caravan park and Brett aggregates quarry. Further south at Newbourne, a concentration of large commercial scale greenhouses occurs just outside the study area.

90. Access along minor roads, connects the settlements of Walderingfield and Newbourne to the larger settlements of Ipswich and Woodbridge to the west and north. A network of footpaths criss-cross the area, mostly following field boundaries and roads. The short section of Coastal Levels traversed by the route is undrained marshland forming a thin wedge adjacent to the River Deben edge. The area is difficult to access despite a footpath that runs behind mature trees and hedgerow along the southern edge.

91. Views within the study area are generally medium to long range in the more open parts to the south, with characteristic views out to the River Deben, and short range in the centre and northern parts of this section due to the strong pattern of mature hedgerows, hedgerow trees along field boundaries and roads, and nearby woodland blocks.

29.2.4.11.1 Sensitivity of landscape receptors

92. This section of the onshore cable route is situated in the Suffolk Coast & Heaths AONB. The landscape is mainly agricultural with small settlements and dispersed farmsteads. The predominantly rural location, medium to long distance views to the south of the area, and the scenic quality of views over the River Deben to the east and north of the route contribute to the value of the landscape which is assessed as medium to high. Susceptibility to change from the proposed project is considered to be medium owing to the potentially localised impacts and the capacity to restore the landscape character. The overall sensitivity to the proposed East Anglia THREE project is considered to be **medium to high**.

29.2.4.11.2 Sensitivity of visual receptors

93. Footpaths, bridleways, a National Cycle Route and minor roads occur along this section of the route. The small settlement of Waldringfield is situated to the east of the study area and will experience few visual impacts from the proposed East Anglia THREE project due to landform and intervening trees, hedgerows and other landscape features.

94. Public footpaths and bridleways within the study area are generally situated along field boundaries to the south of Waldringfield, where they have views across the agricultural landscape, and to the south of Martlesham Creek where they have rural views across agricultural fields and elevated views over Martlesham Creek. There are a mixture of fields bounded by fragmented hedgerows with gaps in places, field boundaries with no hedgerows and fields with full hedgerows. Mature trees and tall hedgerows restrict or filter views in places. To the south, footpaths and bridleways link the settlement of Waldringfield to the wooded valley and rural dwellings to the west and south-west of the settlement. To the north of this section, the footpaths form a dense network around Martlesham Hall, on the north and east facing slopes of Martlesham Creek.

95. Recreational users of footpaths and bridleways are assessed as having a medium susceptibility to change from the proposed East Anglia THREE project. The views, although in an AONB, are mainly over agricultural fields in the south around Waldringfield and are incidental views and not views that are formally recognised for their scenic value. The value of the views is assessed as medium to high. To the north, the views over Martlesham Creek are extensive in places and are of importance owing to their more scenic nature.. Susceptibility to change for users of the footpaths and bridleways is considered to be medium. Existing cables will be used and views of the creek will be largely undisturbed. The overall sensitivity of users of the footpaths and bridleways to the proposed East Anglia THREE project is considered to be medium to high.

96. The Fynn Valley Walk passes to the west of the onshore cable route, mainly following field boundaries and traversing open fields in places. The onshore cable route will not pass under the route and at its closest, the proposed East Anglia THREE project will pass through an adjacent field where it will not be visible. Elsewhere along the Fynn Valley Walk, distance, hedgerows, trees and woodland will obscure views towards the proposed East Anglia THREE project.

97. The onshore cable route traverses a minor road to the west of Waldringfield. To the north of Waldringfield the proposed onshore cable route switches from west to east of Waldringfield Road (National Cycle Route), passing through open agricultural fields beside the road. In this section of the onshore cable route there are open views across the agricultural landscape. Mature trees are situated at the side of the roads which appear as overgrown hedges and form informal arching avenues in places. There are occasional gaps between sections of trees and sections of lower lying hedge with more formal hedgerow trees. Road users in cars will generally be travelling in excess of 30mph and any discernible changes will be visible for only a short duration of time. Susceptibility to change from the proposed East Anglia THREE project is considered to be medium to low for road users in cars and medium for cyclists who will be travelling at a slower speed and will experience more of the landscape scenery as a result. The views, although in an AONB, are mainly over agricultural fields and are incidental views and not views that are formally recognised for their scenic value. Therefore, the value of the views is assessed as medium. The overall sensitivity to the proposed East Anglia THREE project is considered to be **medium** for road-users and **medium** for cyclists.

98. The settlements of Waldringfield and Newbourne will have filtered views of the onshore cable route in this area. The onshore cable route will pass through agricultural fields. The value of the views is assessed as **medium to high**. Residents in local houses have a **medium** susceptibility to change from the proposed East Anglia THREE project. Although the changes would be minor and will create short term changes in views, they will be a feature in the views from their primary place of residence and will create short term changes in views. Overall sensitivity from residents in Waldringfield and Newbourne is assessed as **medium to high**.

29.2.4.12 Section 5 – RVX03 (Martelsham Creek) to Road Crossing RDX12 (A12)

99. In this section the onshore cable route passes through the rising landscape to the north of the River Deben and entering the undulating urban fringes of Woodbridge. There are 2 LCTs within this section of the route:

- LCT 19 – Rolling Valley Farmlands and Furze; and
- LCT 26 – Valley Meadowlands.

100. The key characteristics of the Valley Meadowlands are described above in section 29.3.10. The Rolling Valley Farmlands and Furze within this section of the route has a semi-urban influence. It is described as:

Valley landscapes with distinctive areas of grass and gorse heaths

- *Valleys with prominent river terraces of sandy soil*
- *Small areas of gorse heathland in a clayland setting*
- *Straight boundaries associated with late enclosure*
- *Co- axial field systems*
- *Mixed hedgerows of hawthorn, dogwood and blackthorn with oak, ash and field maple*
- *Fragmentary cover of woodland*
- *Sand and gravel extraction*
- *Golf courses*
- *Focus for larger settlements*

101. The onshore cable route in this section passes through a short section of Valley Meadowlands before passing through approximately 1.5km of Rolling Valley Farmlands and Furze. This is illustrated in Figure 29.4b.

102. This is a small scale landscape with a rising topography from the river bed at approximately 1m AOD to approximately 20m AOD at its highest point adjacent to the A12. However the landform has been modified due to the introduction of infrastructure and urban elements including road and rail engineering, construction works, earthworks, artificial mounds, uneven ground and areas of hard standing.

103. Land use in the area is composed of semi-urban and urban elements including housing, commercial premises, sewerage works, the A12 corridor and roundabout, and vacant land from highway alterations which are regenerating with gorse and scrub woodland. To the south of the Rolling Valley Farmlands and Furze, large fields are given to tree and plant production.

104. Within the study area, Valley Meadowland has not been divided into smaller fields and is maintained as an area of large meadow. There is a long distance footpath, the Fynn Valley Walk, along the southern edge of this LCT area, where the main focus is Martlesham Creek and the River Deben. This contrasts with the busy road and rail

infrastructure to the north of this section and provides a sense of relative tranquillity.

105. The study area includes the southern edge of the settlement of Woodbridge and the northern outskirts of the settlement of Martlesham. There are farms and some semi-rural dwellings between the main settlements.

29.2.4.12.1 Sensitivity of landscape receptors

106. There are no landscape designations in this section of the route. The presence of road and rail infrastructure and the built environment reduce the value of the landscape. The overall value of the landscape within the study area is medium. Susceptibility to change on landscape character from the pulling through of cables will be medium to low owing to the localised nature of the impacts and their relatively short duration. The overall sensitivity to the proposed East Anglia THREE project is considered to be **medium to low**.

29.2.4.12.2 Sensitivity of visual receptors

107. Footpaths, bridleways, a rail line, minor roads and the A12 road corridor occur along this short section of the route. The settlement of Woodbridge is situated to the north of the study area and will experience few visual impacts from the proposed East Anglia THREE project due to landform and intervening trees, hedgerows and other landscape features.

108. Public footpaths and bridleways within the study area are generally situated along roadsides and access tracks to the north of the rail line, where they have views influenced by urban elements as well as road and rail infrastructure. Generally the footpaths and bridleway to the north-east of the study area in this section will have no views due to intervening urban elements and woodland. Footpaths to the west of this section will be affected by the proposed East Anglia THREE project as it passes to the south of the A12. In this area there are two footpaths, one which crosses an open field, and the other which is the Fynn Valley Way, which follows the edge of a field which is open on one side and has partial hedgerow with gaps and mature trees to the other side. Both of these paths converge and pass under the A12 embankment via an underpass. Recreational users of the footpaths will have a medium susceptibility to change from the proposed East Anglia THREE project. The value of the views is assessed as medium. The overall sensitivity of users of the footpaths to the proposed East Anglia THREE project is considered to be **medium**.

109. The onshore cable route traverses two minor roads in this section. Mature trees and hedgerows are situated at the side of the roads. Built and engineered elements are visible in most views from the roads. Road users will generally be travelling at 30mph, and closer to 40-60mph on the A12, such that any discernible changes will

be transitory. Susceptibility to change from the proposed East Anglia THREE project is considered to be medium to low for road users along the minor roads. The views are mainly over small fields towards built or engineered elements and are incidental views and not views that are formally recognised for their scenic value. Therefore the value of the views is assessed as medium to low. The overall sensitivity of road users to the proposed East Anglia THREE project is considered to be **medium to low**.

110. The settlements of Martlesham and Woodbridge will have filtered views of the onshore cable route. The onshore cable route will pass through agricultural fields in the context of semi-urban elements such as rail line embankment to the north of this section. The value of the views is assessed as medium. Residents in local houses have a medium susceptibility to change from the proposed East Anglia THREE project. Although the changes would be minor and will create short term changes in views, they will be a feature in the views from their primary place of residence and will create short term changes in views. Overall sensitivity from residents in Martlesham and Woodbridge is assessed as **medium**.

29.2.4.13 Section 6 – Road Crossing RDX12 (A12) to Road Crossing RDX18 and Section 7 – Road Crossing RDX18 to Road Crossing RDX19

111. These two sections of the route pass through the same landscape character types and have therefore been combined. In these sections the onshore cable route passes through the undulating valley landscape associated with the River Fynn and its tributaries, and the rolling farmland beyond. There are two LCTs within this section of the route:

- LCT 04 – Ancient Rolling Farmlands; and
- LCT 19 – Rolling Valley Farmlands and Furze.

112. The key characteristics of the Rolling Valley Farmlands and Furze LCT is described above in section 29.3.12. The Ancient Rolling Farmlands LCT occur further to the west of the onshore cable route and are described as:

A rolling landscape of medium clay soils studded with blocks of ancient woodland

- *Rolling arable landscape of chalky clays and loams*
- *Dissected widely, and sometimes deeply, by river valleys*
- *Field pattern of ancient random enclosure. Regular fields associated with areas of heathland enclosure*
- *Hedges of hawthorn and elm with oak, ash and field maple as hedgerow trees*

- *Substantial open areas created for airfields and by post WWII agricultural improvement*
- *Scattered with ancient woodland parcels containing a mix of oak, lime, cherry, hazel, hornbeam, ash and holly*
- *Network of winding lanes and paths, often associated with hedges, create visual intimacy*
- *Dispersed settlement pattern of loosely clustered villages, hamlets and isolated farmsteads of mediaeval origin*
- *Farmstead buildings are predominantly timber-framed, the houses colour-washed and the barns blackened with tar. Roofs are frequently tiled, though thatched houses can be locally significant*
- *Villages often associated with village greens or the remains of greens*

113. The onshore cable route in this section passes through approximately 5km of Rolling Valley Farmlands and Furze and approximately 5km of Ancient Rolling Farmlands, much of which is passed through intermittently in places where the onshore cable route comes out of the River Fynn valley for a short stretch. Beyond the valley, the onshore cable route passes through a longer section of Ancient Rolling Farmlands before entering into the Rolling Estate Farmlands for approximately 0.7km at its western edge. This is illustrated in Figure 29.4c.

114. The valley landform and surrounding undulating landform, has an influence on both the experience and use of the agricultural landscape within the study area. From the top of the valleys and in the undulating landscape surrounding the valleys, the landscape is experienced as large scale and open. The valleys themselves are often low lying and in some places subtle, however the rising landform combined with frequent tree cover on steeper slopes creates a sense of enclosure.

115. The rolling and sinuous nature of the landscape has produced irregular field patterns in places. In general terms, the fields are large and open, particularly towards the top of the valleys and in the rolling farmlands where they are mainly used for arable crops. Within the valleys, fields are generally smaller and irregular in shape and contain a mixture of arable and pasture. As the valleys are susceptible to flooding, the field patterns tend not to extend into the base of the valley.

116. Mature hedgerows, and small parcels of native deciduous hedgerows give this area a well wooded feel and mature oak trees form prominent landscape features within the dispersed woodlands, many of which clad the valley sides. The tall and mature

nature of these hedgerows has a strong visual impact on the landscape. The woodland cover is largely semi-natural.

117. To the east of the onshore cable route, the completeness and connectivity of the hedgerow network varies, with some field boundaries consisting of mature hedgerows supported by mature trees, and some without any field boundaries at all or with post and wire fencing. To the west of the route in this section, the hedgerows are mainly intact.

118. Access in the area is by minor, mainly single track roads, and through a network of footpaths which generally follow field boundaries. Roadside hedgerows are a strong feature, particularly in the west of the route corridor. To the east of the route corridor there are a mixture of open roadsides with no hedgerows and mature hedgerows with mature trees. There is a long distance walking route along the Fynn valley.

119. Settlement in the area consists of several tightly clustered small villages and farmsteads that appear relatively isolated. Villages are generally situated on elevated or sloping ground within the River Fynn valley. This is a feature of the Rolling Valley Farmlands and Furze LCT where there is evidence of settlements on valley sides from a very early date with several archaeological settlement remains in the wider LCT area.

120. Although it is essentially an agricultural landscape, views within the study area frequently feature properties giving the impression of a well-settled landscape. Roofscapes of small settlements and farmsteads together with overhead power lines are constant elements in views. Views within the valleys are more intimate although the tall hedgerows, woodland blocks and rolling topography also limit views outside the valley.

29.2.4.13.1 Sensitivity of landscape receptors

121. The Fynn valley is a locally important landscape which is reflected by its designation as an SLA. The landscape is predominantly influenced by human activity as is evidenced in the intensively farmed landscape, as well as the presence of villages. Other elements, such as the presence of pylons, also detract from the overall value of the area which is considered to be medium to high within the study area. Susceptibility is considered to be medium owing to the potentially localised impacts and the capacity for restoration. The overall sensitivity to the proposed East Anglia THREE project is considered to be **medium to high**.

29.2.4.13.2 Sensitivity of visual receptors

122. Footpaths, minor roads, a National Cycle Route and the Fynn Valley Walk occur in this section, with Little Bealings and Great Bealings the closest settlements to the onshore cable route. The edges of the settlements of Playford and Tuddenham St. Martin are also within the study area but will experience few visual impacts from the proposed East Anglia THREE project due to landform and intervening trees, hedgerows and other landscape features.

123. Public footpaths and bridleways within the study area are generally situated along field boundaries, follow the Fynn Valley and the undulating landscape beyond. They connect small settlements, rural dwellings and farmsteads. The Fynn Valley Walk forms part of a long distance route and travels along the southern edge of the study area and then north at Tuddenham St. Martin. Views vary from the footpaths with some experiencing intimate views within the valley and others experiencing relatively open views from elevated fields in the undulating agricultural landscape. Many of the field boundaries consist of hedgerows with trees which restrict or filter views in places. Recreational users of footpaths and the Fynn Valley Walk are assessed as having a **medium to high** susceptibility to change from the proposed East Anglia THREE project due to the attractiveness of the rural landscape. The views are mainly over agricultural fields and are incidental views and not views that are formally recognised for their scenic value. The value of the views is assessed as **medium**. The overall sensitivity of users of the footpaths to the proposed East Anglia THREE project is considered to be **medium to high**.

124. The onshore cable route generally follows a series of minor roads as they traverse the landscape following the Fynn Valley from east to west where they connect the settlements of south Woodbridge, Little Bealings and Tuddenham St. Martin, this section also forming part of a National Cycle Route. The onshore cable route passes under these roads and additional minor roads. Road users in cars will generally be travelling in excess of 30mph along these roads and will have a transitory view of the onshore cable route in a localised area. Susceptibility to change from the proposed East Anglia THREE project is considered to be medium to low for road users in cars along the minor road and medium for cyclists who will be travelling at a slower speed and will therefore experience the view for a longer duration. The views are mainly over agricultural fields and are incidental views and not views that are formally recognised for their scenic value. Therefore the value of the views is assessed as medium. The overall sensitivity of road users to the proposed East Anglia THREE project is considered to be **medium** for road users in cars and **medium** for cyclists.

125. The settlements of Little Bealings and Great Bealings will experience little physical impact from the onshore cable route due to the pulling through of cables. The value of the views is assessed as medium. Residents in local houses will have a medium to high susceptibility to change from the proposed East Anglia THREE project, since it will be a feature in the views from their primary place of residence and will pass close to the settlements. Overall sensitivity from residents in Little Bealings and Great Bealings is assessed as **medium to high**.

29.2.4.14 Section 8 –Road Crossing RDX19 to Road Crossing RDX24 (A14)

126. In this section the onshore cable route passes through the rolling agricultural landscape to the north of Ipswich and the immediate east of the A14 road corridor. There are two LCTs within this section of the route:

- LCT 04 – Ancient Rolling Farmlands; and
- LCT15 – Rolling Estate Farmlands.

127. The key characteristics of the Ancient Rolling Farmlands LCT are described above in section 29.3.13. Rolling Estate Farmlands LCT are described as:

A valley side landscape of deep loams, with parklands plantations and Ancient Woodlands

- *Gently sloping valley sides and plateau fringes*
- *Generally deep loamy soils*
- *An organic pattern of fields modified by later realignment*
- *Important foci for early settlement*
- *Coverts and plantations with some ancient woodlands*
- *Landscape parks with a core of wood pasture*
- *Location for mineral workings and related activity, especially in the Gipping valley*

128. The onshore cable route in this section passes through approximately 3km of Ancient Rolling Farmlands LCT and approximately 2km of Rolling Estate Farmlands LCT. This is illustrated in Figure 29.4d.

129. The landscape in this section is gently rolling with large to medium sized fields. There is a sense of openness that relates to the large fields, limited enclosure and the relatively flat landscape.

130. Field patterns are irregular in formation with a mixture of angular boundaries formed from realigned older field patterns and more sinuous boundaries along roads, access tracks and watercourses, which often follow the natural contours. More medium sized fields are found around areas of settlement such as clusters of farm dwellings and loosely formed semi-rural settlements. This is most noticeable around Arkenham and echoes a more ancient field pattern and land-use, which included closes and meadows.

131. Hedgerows are intermittent along this section of the route with a mixture of intact boundaries and neglected boundaries with notable gaps. In some locations field boundaries are formed either from a grass verge or post and wire fencing. Bare earth is a frequent seasonal feature in ploughed fields.

132. A network of footpaths and minor roads provide access into the area which is predominantly experienced as a semi-rural landscape. Around Akenham, access is limited and only tracks access more remote farmsteads and properties. The A14 introduces a source of activity and noise to the western edge of this area, with its influence carrying across the surrounding landscape.

133. Settlement within the study area consists of large farmsteads and semi-rural dwellings. The settlement of Ipswich is visible in places and the settlement of Claydon is situated within the study area adjacent to the A14 to the west of the route. Overhead power lines form a prominent feature across this landscape and are visible from most locations within the study area. Views are generally of agricultural fields with scattered semi-rural dwellings and farmsteads frequently featuring as visible elements.

29.2.4.14.1 Sensitivity of landscape receptors

134. There are no landscape designations within this section and the character of the landscape is defined by the intensively farmed agricultural landscape. While a pattern of enclosure exists, in parts it is sparse and this adds to the perceived openness of the landscape. Developments such as pylons and settlements further detract from the rural quality. The value of the landscape is assessed as medium. Susceptibility to change from the construction of the onshore cable route is assessed as medium to low reflecting the short term nature of these works, their localised extent and the small scale change they will incur. The overall sensitivity to the onshore cable route is assessed as **medium**.

29.2.4.14.2 Sensitivity of visual receptors

135. Footpaths, minor roads, Bridleways and the A14 road corridor occur in this section of the route.

136. Public footpaths and bridleways within the study area are generally situated along field boundaries and access tracks to dispersed farms and historic halls. Views are relatively open from elevated areas in the undulating agricultural landscape. Many of the field boundaries are open with post and wire fencing or have mature or semi-mature trees with large gaps in places. Woodland is limited in this section and occurs mainly as riparian woodland along a minor water course and as shelterbelt planting adjacent to farm buildings. Recreational users of footpaths and bridleways are assessed as having a **medium** susceptibility to change from the proposed East Anglia THREE project due to the open nature of views. The views are mainly over agricultural fields and are incidental views and not views that are formally recognised for their scenic value. The value of the views is assessed as **medium**. The overall sensitivity of users of the footpaths and bridleways to the proposed East Anglia THREE project is considered to be **medium**.

137. The onshore cable route crosses two minor roads which connect Ipswich to the south to the village of Henley and connect Westerfield to the south to Cockfield Hall to the north of the study area. The road sections traversed by the onshore cable route occur where there are views across large agricultural fields facilitated by open field boundaries. The exception is a low hedge to the west of the road to Cockfield Hall. Susceptibility to change from the proposed East Anglia THREE project is considered to be medium to low for road users along the minor road. The views are mainly over agricultural fields and are incidental views and not views that are formally recognised for their scenic value. Therefore, the value of the views is assessed as medium. The overall sensitivity of road users to the proposed East Anglia THREE project is considered to be **medium**.

138. Road users on the A14 road corridor will be travelling at approximately 60 mph and will be primarily focused on the road in front of them. Subtle changes during construction works, seen at an oblique angle on the periphery of the road for a very short duration ensures the sensitivity of A14 road-users is also **medium to low**.

29.2.4.15 Section 9 –Road Crossing RDX24 (A14) to End (Substation)

139. In this section, the onshore cable route passes through the rolling agricultural landscape to the north-west of Ipswich and the immediate west of the A14 road corridor. There are four LCTs within this section of the route:

- LCT 03 – Ancient Plateau Claylands;
- LCT 15 – Rolling Estate Farmlands;
- LCT 18 – Rolling Valley Farmlands; and

- LCT 26 –Valley Meadowlands.

140. The key characteristics of the Valley Meadowlands LCT and Rolling Estate Farmlands LCT are described above in sections 29.3.9.10 and 29.3.14 respectively. Rolling Valley Farmlands LCT occurs as the landscape rises to the west from the River Gipping Valley Meadowlands. It is described as:

- *Gentle valley sides with some complex and steep slopes*
- *Deep well drained loamy soils*
- *Organic pattern of fields smaller than on the plateaux*
- *Distinct areas of regular field patterns*
- *A scattering of landscape parks*
- *Small ancient woodlands on the valley fringes*
- *Sunken lanes*
- *Towns and villages with distinctive mediaeval cores and late mediaeval churches*
- *Industrial activity and manufacture, continuing in the Gipping valley*
- *Large, often moated, houses*

141. Further west, the undulating valley sides level out and form the Ancient Plateau Claylands LCT. This is described as:

Gently rolling heavy clay plateaux with ancient woodlands

- *Flat or gently rolling arable landscape of clay soils dissected by small river valleys*
- *Field pattern of ancient enclosure – random patterns in the south but often co-axial in the north. Small patches of straight-edged fields associated with the late enclosure of woods and greens*
- *Dispersed settlement pattern of loosely clustered villages, hamlets and isolated farmsteads of medieval origin*
- *Villages often associated with medieval greens or tyes*
- *Farmstead buildings are predominantly timber-framed, the houses colour-washed and the barns blackened with tar. Roofs are frequently tiled, though thatched houses can be locally significant*

- *Scattered ancient woodland parcels containing a mix of oak, lime, cherry, hazel, hornbeam, ash and holly*
- *Hedges of hawthorn and elm with oak, ash and field maple as hedgerow trees.*
- *Substantial open areas created for WWII airfields and by 20th century agricultural changes*
- *Network of winding lanes and paths often associated with hedges create visual intimacy*

142. The onshore cable route in this section passes through a short section of Rolling Estate Farmlands LCT (approximately 0.5km) before crossing through the Valley Meadowlands LCT (approximately 0.75km) and entering the Rolling Valley Farmlands LCT. The route continues through the Rolling Valley Farmlands LCT for approximately 1.5km and then alternates between Rolling Valley Farmlands LCT and Ancient Plateau Claylands LCT for a further 1km before reaching the substation which is located in the Ancient Plateau Claylands LCT. This is illustrated in Figure 29.4d.

143. The landscape topography is more complex to the east as it passes from the transitional edge of the Rolling Valley Farmland into the more intimate River Gipping valley and then into the undulating valley sides, before reaching the relatively simple plateau in the west.

144. The land use pattern, although predominantly agricultural, also reflects the complexity of the topography. Large fields to the immediate west of the A14 give way to smaller scale fields interspersed with woodland as the landscape falls towards the base of the valley. At the base of the valley around the location of the onshore cable route crossing, there are a mixture of land uses. A rail line bisects the valley bottom and to the east of the rail line, the River Gipping meanders forming an informal edge to the meadowlands and small fields at either side of the river. To the west of the rail line, a series of ponds and formal / informal woodland planting create the designed landscape of Suffolk Water Park. The rising landscape to the west features irregular shaped medium to large scale fields, which continue into the plateau landscape, becoming smaller in scale at the edges of settlements.

145. Although hedgerows are still a characteristic feature of the landscape in this section of the route, there are few hedges that remain intact. Many of the field boundaries are a mixture of intact areas of hedgerow with mature trees, areas with some gaps or occasional trees, and large sections with no hedgerow. Other vegetation in the area includes scattered parcels of ancient woodland parcels, particularly in the

Gipping valley area. Arable crops fill the fields apart, from seasonally when bare earth is ploughed.

146. There is a network of winding lanes and footpaths in the west of the area. To the east, additional communications include the busy A14 and the rail line through the valley. Pylon lines also form linear man-made features in the landscape and cross through the surrounding countryside as they converge on the existing sub-station at Bramford. Other man made features in the landscape include quarries, industrial development and landfill.

147. Views are extensive, particularly on higher ground. Small woodland blocks and sections of hedgerow are seen in many views and can limit views in lower lying areas. Overhead transmission lines and pylons are seen on the skyline in most views within the study area.

29.2.4.15.1 Sensitivity of landscape receptors

148. The Gipping valley has a local SLA designation, indicating its local value in terms of landscape character. Elsewhere arable fields are the predominant feature with hedgerows that are not always intact. Man-made built elements within the landscape such as pylons and industrial units reduce the overall value of the landscape which is considered to be medium. Susceptibility to change from the introduction of the onshore cable route construction is assessed as medium due to open fields and incomplete hedgerows. The overall sensitivity of the landscape to the proposed onshore cable route in this area is assessed as **medium**.

29.2.4.15.2 Sensitivity of visual receptors

149. Footpaths, the Gipping Valley River Path long distance footpath, Bridleways, minor roads and a National Cycle Route occur in this section of the route within the study area.

150. Public footpaths within the study area are generally situated along field boundaries although there are some which cross through open fields. The Gipping Valley River Path hugs the edge of the watercourse as the River Gipping winds through the landscape. In general the footpaths and bridleways connect areas of settlement to minor roads, dispersed farms and historic halls. Views vary from the footpaths with some experiencing intimate views in the Gipping valley and others experiencing relatively open views from elevated fields in the undulating agricultural landscape. Views include overhead transmission lines and pylons which converge at a substation at Bramford. Recreational users of footpaths and bridleways are assessed as having a medium susceptibility to change from the proposed East Anglia THREE project. Footpaths near to the substation will be susceptible to a higher level of change from the proposed East Anglia THREE project, albeit in a context which is

already influenced by the presence of electricity transmission line. The views are mainly over agricultural fields and are incidental views and not views that are formally recognised for their scenic value. The value of the views is assessed as medium. The overall sensitivity of users of the footpaths to the proposed East Anglia THREE project is considered to be **medium** for the majority of the footpaths.

151. The cable route crosses under four minor roads radiating from Bramford to the north, north-west and west. The National Cycle Route follows a road west from Bramford to the village of Flowton and Elmsett beyond. The road / NCR sections traversed by the onshore cable route occur where there are views across large agricultural fields. Many of the points of crossing have an open field boundary at one side of the road. Hedgerows or mature / semi-mature trees occur along the roadside where there are no open boundaries. Frequently there are gaps in the hedgerows and trees, often with tall ruderals in-filling the gap. Susceptibility to change from the proposed East Anglia THREE project is considered to be medium for road users along the minor road. The views are mainly over agricultural fields and are incidental views and not views that are formally recognised for their scenic value. Therefore the value of the views is assessed as medium. The overall sensitivity of road users to the proposed East Anglia THREE project is considered to be **medium**.

29.2.4.16 Substation study area

152. The substation and the surrounding 4km radius study area are situated within predominantly agricultural land. There are six LCTs within this study area:

- LCT 01 – Ancient Estate Claylands;
- LCT 03 – Ancient Plateau Claylands;
- LCT 03 –Plateau Estate Farmlands;
- LCT 15 – Rolling Estate Farmlands;
- LCT 18 – Rolling Valley Farmlands; and
- LCT 26 –Valley Meadowlands.

153. The substation and its study area lie within Ancient Plateau Claylands LCT (described above in section 29.3.15) which forms the predominant LCT within the study area. Running through the plateau is the Rolling Valley Farmlands LCT (described in section 29.3.15) which have been formed around natural streams as they have carved through the landscape towards the River Gipping to the east of the study area and the River Orwell beyond the study area to the south-east. The River Gipping lies within the Valley Meadowlands LCT (described in section 29.3.9.10) to the east of

the study area and narrow areas of Rolling Estate Farmlands LCT (described in section 29.3.14) and Plateau Estate Farmlands LCT are located to the east of the valley immediately adjacent to the urban settlement of Ipswich. To the south-east and south, the study area also includes areas of Plateau Farmlands LCT and Ancient Estate Claylands LCT. This is illustrated in Figure 29.3.

154. Plateau Estate Farmlands LCT are described as:

A landscape of large regular fields with small woodlands on light loamy soils

- *Flat landscape of light loams and sandy soils*
- *Large scale rectilinear field pattern*
- *Network of tree belts and coverts*
- *Large areas of enclosed former heathland*
- *18th- 19th & 20th century landscape parks*
- *Clustered villages with a scattering of farmsteads around them*
- *Former airfields*
- *Vernacular architecture is often 19th century estate type of brick and tile*

155. Plateau Farmlands LCT are described as:

Plateaux of medium soils with a mix of 'ancient' and 'planned' countryside

- *Plateaux of land between river valleys*
- *Loamy soils amenable to arable farming*
- *Irrigated crops*
- *Sinuous lanes and hedge lines*
- *Substantial elements of planned landscape*
- *Plantation woodland*
- *Parkland and planting of exotic trees*
- *Feeling of isolation and tranquillity*
- *Dissected by major roads*

156. Ancient Estate Claylands LCT are described as:

Gently rolling heavy clay plateaux with ancient woodlands and parklands

- *Dissected Boulder Clay plateau*
- *Organic pattern of field enclosures*
- *Straight boundaries where influence of privately owned estates is strongest*
- *Enclosed former greens and commons*
- *Parklands*
- *WWII airfields*
- *Villages with dispersed hamlets and farmsteads*
- *Timber framed buildings*
- *Distinctive estate cottages*
- *Ancient semi-natural woodland*

157. The landscape within the study area is predominantly agricultural in nature with the land use pattern relating to the topography. The valley landscape and meadowlands around the River Gipping to the east of the study area are generally more enclosed and intimate in nature and comprise smaller scale fields interspersed with parcels of ancient woodland. The rising landscape to the west of the River Gipping valley features irregular shaped medium to large scale fields which continue into the plateau landscape, becoming smaller in scale along the narrow valley farmlands that follow the streams such as The Channel and Flowton Brook, in an easterly and south-easterly direction. Smaller field patterns also occur at the edges of settlements.

158. Many of the field boundaries are a mixture of intact areas of hedgerow with mature trees, areas with some gaps or occasional trees, and large sections with no hedgerow. Other vegetation in the area includes scattered parcels of ancient woodland, particularly in the Gipping valley area, and transitional arable crops in fields.

159. Communications include the busy A14 to the far east of the study area, the rail line through the Gipping valley and a network of minor roads, tracks and footpaths in the west of the area.

160. Pylon lines form linear man-made features in the landscape and cross through the surrounding countryside, converging on the existing sub-station at Bramford, which is itself a prominent feature in the landscape. Other man made features in the landscape include quarries, industrial development and landfill.

161. The main settlement pattern in the study area is of isolated farmsteads and small villages which are scattered throughout the landscape and often situated within the valleys (Rolling Valley Farmlands LCT). To the far east of the study area, lies the western edge of Ipswich which is visible in long views from elevated positions in the LCT. The settlements of Sproughton and Bramford extend the urban influence into the study area.

162. Views are extensive, particularly on higher ground and frequently open. Small woodland blocks and sections of hedgerow are seen in many views and can limit views in lower lying areas. Overhead transmission lines and pylons are seen on the skyline in most views within the study area.

163. The Gipping valley area has a local SLA designation, indicating its local value as a landscape feature, and there is a further SLA to the west and south of the study area relating to the village of Burstall and Burstall Hall. The overall value of the area is reduced by the presence of prominent, large-scale man-made infrastructure and industrial elements with vertical emphasis and engineered patterns. Although the landscape character is well defined in most areas, it mainly consists of arable fields which are a common resource in the wider area. In addition there are some key landscape elements such as hedges and hedgerow trees that have degraded over time. The overall value of the study area is therefore considered to be medium.

29.2.4.16.1 Sensitivity of landscape receptors

164. Susceptibility to change from the introduction of the substation is assessed as medium reflecting the scale of the proposed East Anglia THREE project, albeit in a localised area which is characterised by the presence of a convergence of electricity transmission lines. The stanchions form prominent vertical features which are visible above the height of the surrounding woodland and which detract from the otherwise predominantly rural character. The existing Bramford Substation and consented East Anglia ONE converter station are largely concealed by existing woodland such that there influence is limited to localised close range parts of the LCT. The value of the landscape is assessed as medium reflecting the agricultural character of the landscape, which is a fairly common resource in the wider area. The overall sensitivity of the landscape to the proposed East Anglia THREE substation in this area is assessed as **medium**.

29.2.4.16.2 Sensitivity of visual receptors

165. Footpaths, the Gipping Valley River Path long distance footpath, Bridleways, minor roads and a National Cycle Route are situated within the 4km study area.

166. Public footpaths within the study area are generally situated along field boundaries although there are some which cross through open fields. There are two footpaths in close proximity to the proposed East Anglia THREE project, to the east and west, and a bridleway which passes in close proximity to the south. Views vary from the footpaths and bridleways, with some experiencing intimate views in lower lying areas and others experiencing relatively open views from elevated fields in the undulating agricultural landscape. Many of the field boundaries consist of hedgerows with trees which restrict or filter views in places. Shelterbelt planting and areas of woodland are a common feature and further restrict views in places. There are blocks of woodland immediately surrounding the proposed site which will provide some screening in views. Overhead transmission lines and pylons converge at the substation at Bramford and populate the landscape and skyline in the study area.

167. Representative viewpoints have been selected to represent the visual amenity of walkers, residents, road-users, horse riders and cyclists in the study area (VP 5, 6, 10, 11, 12, 15 and 16). The value of these views, along with the susceptibility of the viewers and their overall sensitivity to change is described in relation to each of these viewpoints, presented in Appendix 29.4 –Landscape and Visual Impact Assessment of Substation.

Appendix 29.2 Ends Here