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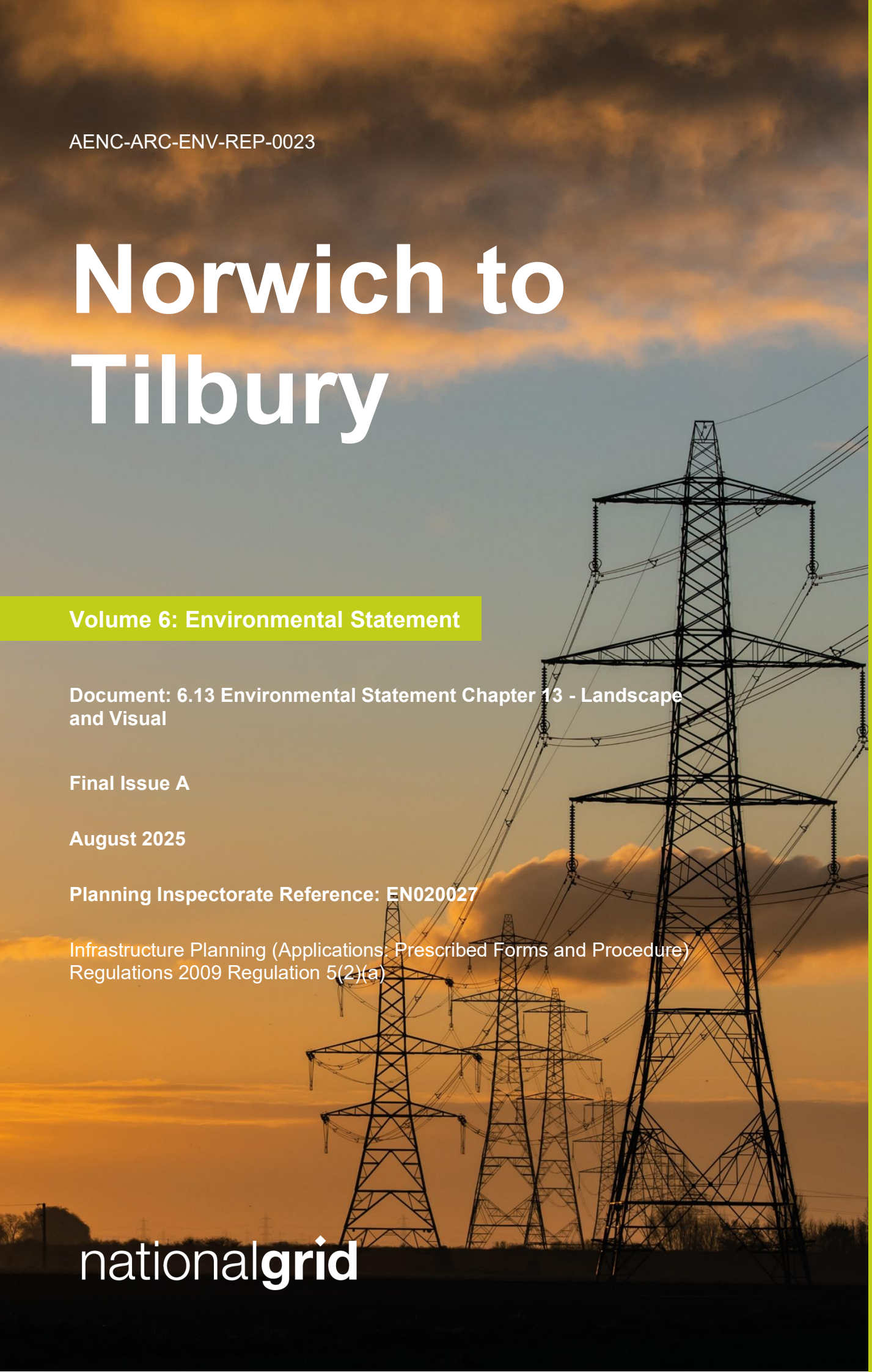

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13. Landscape and Visual

13.1 Introduction

13.1.1 This chapter of the Environmental Statement (ES) (Volume 6 of the Development Consent Order (DCO) application) details the assessment of the potential residual effects of Norwich to Tilbury (the 'Project') on Landscape and Visual amenity. This chapter covers effects on the following, during construction and operation (and maintenance):

- Effects on visual amenity, including effects upon potential receptors (people) and viewing groups caused by changes in the appearance of the landscape, as follows:
  - Effects on visual receptors at settlements / communities / groups of properties
  - Effects on receptors travelling on roads
  - Effects on recreational receptors, including users of Public Rights of Way (PRoWs) and long-distance routes and visitor attractions
  - Effects on visual receptors at representative viewpoints
- Effects on landscape character and resources, including effects upon the physical elements (e.g. landform or vegetation), character and/or qualities of the landscape, with reference to Landscape Character Areas (LCAs) and Landscape Character Types (LCTs)
- Effects on designated landscapes – Dedham Vale National Landscape (an Area of Outstanding Natural Beauty (AONB))
- Effects on designated landscapes, landscape character and visual amenity at night due to the potential effects of lighting (where applicable)
- Effects on visual amenity for individual properties, considered in a Residential Visual Amenity Assessment (RVAA).

13.1.2 There are interrelationships between the likely residual effects on Landscape and Visual amenity and other environmental topics. Therefore, please also refer to the following chapters:

- Chapter 8: Ecology and Biodiversity (document reference 6.8)
- Chapter 10: Health and Wellbeing (document reference 6.10)
- Chapter 11: Historic Environment (document reference 6.11)
- Chapter 15: Socio-economics, Recreation and Tourism (document reference 6.15)
- Chapter 16: Traffic and Transport (document reference 6.16).

13.1.3 This chapter is supported by the following figures and appendices:

- Figure 13.1: Landscape and Visual Impact Assessment (LVIA) Study Area and Landscape Designations (document reference 6.13.F1)
- Figure 13.2: Landform and Drainage (document reference 6.13.F2)
- Figure 13.3: Trees and Woodland (document reference 6.13.F3)
- Figure 13.4: Settlements and Infrastructure (document reference 6.13.F4)
- Figure 13.5: National Character Areas and East of England Typology (document reference 6.13.F5)
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- Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1)
- Appendix 13.2: Landscape Baseline and Assessment (document reference 6.13.A2)
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- Appendix 13.4: Residential Visual Amenity Assessment (document reference 6.13.A4)
- Appendix 13.5: National Landscape Assessment Study (document reference 6.13.A5)
- Appendix 13.6: Arboricultural Impact Assessment (AIA) (document reference 6.13.A6).

13.1.4 This chapter has also been produced in parallel with the following DCO document:

- Visualisations (document reference 7.12).

13.2 Regulatory and Planning Policy Context

National Policy Statement (NPS)

13.2.1 Chapter 2: Key Legislation and Planning Policy Context (document reference 6.2) sets out the key overarching policy relevant to the Project. Overarching National Policy Statement for Energy (EN-1) (National Policy Statement EN-1) (Department for Energy Security and Net Zero (DESNZ), 2024) is the key overarching policy relevant to the Project. This is supported by National Policy Statement for Electricity Networks Infrastructure (EN-5) (National Policy Statement (DESNZ, 2024).

13.2.2 Full consideration of the relevant NPSs for the Project and this chapter can be found in the Policy Compliance Document (document reference 5.7).

Overarching NPS for Energy (EN-1)

13.2.3 NPS EN-1 (DESNZ, 2024) contains the following paragraphs relating to Landscape and Visual which have been considered within this chapter.

13.2.4 Paragraph 3.3.62 of NPS EN-1 (DESNZ 2024) explains that the '*Government has concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure*'. Paragraph 4.2.10 states that '*Applicants for CNP infrastructure must continue to show how their application meets the requirements in this NPS and the relevant technology specific NPS, applying the mitigation hierarchy, as well as any other legal and regulatory requirements*'.
As discussed further in the Planning Statement (document reference 5.6), the Project is considered CNP infrastructure.

13.2.5 EN-1 sets out broad guidance in relation to Landscape and Visual effects at section 5.10. Paragraphs 5.10.16 to 5.10.25 of EN-1 summarise what should be included in the Applicant's assessment. The following are of relevance to the Project and are considered in this chapter.

13.2.6 Paragraph 5.10.16 states '*The applicant should carry out a landscape and visual impact assessment and report it in the ES, including cumulative effects*…'.

13.2.7 Paragraph 5.10.17 states '*The landscape and visual assessment should include reference to any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the proposed project.*
The applicant's assessment should also take account of any relevant policies based on these assessments in local development documents in England…'.

13.2.8 Paragraph 5.10.19 states '*The applicant should consider landscape and visual matters in the early stages of siting and design, where site choices and design principles are being established. This will allow the applicant to demonstrate in the ES how negative effects have been minimised and opportunities for creating positive benefits or enhancement have been recognised and incorporated into the design, delivery and operation of the scheme'*.

13.2.9 Paragraph 5.10.20 states *'The assessment should include the effects on landscape components and character during construction and operation. For projects which may affect a National Park, The Broads or an AONBs [Areas of Outstanding Natural Beauty] the assessment should include effects on the natural beauty and special qualities of these areas*'.

13.2.10 Paragraph 5.10.21 states '*The assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity…*'.

NPS for Electricity Networks Infrastructure (EN-5)

13.2.11 EN-5 contains more specific guidance. The following paragraphs from EN-5 relate to the assessment of Landscape and Visual effects and are considered within this chapter.

13.2.12 Paragraph 2.9.7 states '*While the government does not believe that the development of overhead lines is incompatible in principle with applicants' statutory duty under Schedule 9 to the Electricity Act 1989, to have regard to visual and landscape amenity and to reasonably mitigate possible impacts thereon, in practice new overhead lines can give rise to adverse landscape and visual impacts*'.

13.2.13 Paragraph 2.9.11 states '*Landscape and visual benefits may arise through the reconfiguration, rationalisation, or undergrounding of existing electricity network infrastructure. Though mitigation of the landscape and visual impacts arising from overhead lines and their associated infrastructure is usually possible, it may not always be so, and the impossibility of full mitigation in these cases does not countermand the need for overhead lines*.'

13.2.14 Paragraph 2.11.5 states '*The Secretary of State should have special regard to nationally designated landscapes, where the general presumption in favour of overhead lines should be reversed to favour undergrounding*'.

13.2.15 Paragraph 2.11.6 goes on to state that '*Away from these protected landscapes and in locations where there is a high potential for widespread and significant adverse landscape and/or visual impacts, the Secretary of State should be satisfied that the applicant has provided evidence to support a decision on whether undergrounding is or is not appropriate, having considered this on a case-by-case basis, weighing the considerations in paragraph 2.9.24'*.

13.2.16 The considerations in paragraph 2.9.24 include:

- '*the adverse implications of the overhead line proposal;*
- *the cost and feasibility of re-routing overhead lines or mitigation proposals for the relevant line section; and*
- *the cost and feasibility of the reconfiguration, rationalisation, and/or use of underground or subsea cabling of proximate existing or proposed electricity networks infrastructure*'.

13.2.17 Full consideration of the relevant NPSs for the Project can be found in the Policy Compliance Document (document reference 5.7).

Other National Legislation and Policy

13.2.18 Although the Project will be considered against National Policy stated above, the assessment has also been undertaken with, and with reference to, the following national legislation and policy:

- National Planning Policy Framework (Ministry of Housing, Communities and Local Government, 2025) and accompanying planning practice guidance.

Regional and Local Policy

13.2.19 Chapter 2: Key Legislation and Planning Policy Context (document reference 6.2), the Planning Statement (document reference 5.6) and Policy Compliance Document (document reference 5.7) set out relevant regional and local policy.

13.2.20 Key regional and local policy documents relevant to Landscape and Visual, that has informed the assessment within this ES (Volume 6 of the DCO application), comprises:

- Greater Norwich Local Plan (Broadland District Council, South Norfolk Council Norwich City Council and Norfolk County Council, adopted 2024)
- South Norfolk Council Development Management Policies Document (South Norfolk Council, adopted 2015)
- Babergh and Mid Suffolk Joint Local Plan – Part 1 (Babergh District Council / Mid Suffolk District Council, November 2023)
- North Essex Authorities' Shared Strategic Section 1 Plan (adopted 2021) (Tendring, Colchester and Braintree)
- Tendring District Local Plan 2013-2033 and Beyond, Section 2 (Tendring District Council, adopted January 2022)
- Colchester City Local Plan 2017-2033 Section 2 (Colchester City Council, adopted July 2022)
- The Braintree District Local Plan 2013 – 2033 Section 2 (Braintree District Council, adopted July 2022)
- Chelmsford Local Plan, Our Planning Strategy 2013 to 2036 (Chelmsford City Council, adopted May 2020)
- Basildon District Local Plan Saved Policies (Basildon Council, September 2007, updated October 2018)
- Brentwood Local Plan 2016 – 2033 (Brentwood Borough Council, adopted March 2022)
- Thurrock Local Development Framework, Core Strategy and Policies for Management of Development (Thurrock Council, adopted January 2015).

Guidance

13.2.21 Relevant guidance, specific to Landscape and Visual, that has informed this ES (Volume 6 of the DCO application), comprises:

- Guidelines for Landscape and Visual Impact Assessment – 3rd Edition (GLVIA3) (Landscape Institute and Institute for Environmental Management and Assessment (IEMA), 2013)
- Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment (Planning Inspectorate, 2024)
- Technical Information Note (TIN): Landscape Character Assessment (Technical Information Note 08/15) (Landscape Institute, 2016)
- Technical Guidance Note (TGN) 02/21 Assessing landscape value outside national designations (Landscape Institute, 2021)
- TGN 06/19 Visual Representation of Development Proposals (Landscape Institute, 2019).

13.3 Scope of the Assessment

13.3.1 The scope of the assessment has been informed by the Environmental Impact Assessment (EIA) Scoping Report (document reference 6.19) and EIA Scoping Opinion (document reference 6.20) provided by the Planning Inspectorate in 2022 on behalf of the Secretary of State. The scope has also been informed through consultation and engagement with relevant consultees. A summary of the scope of the Landscape and Visual assessment is provided in Appendix 5.2: Scope of the Assessment (document reference 6.5.A2).

13.3.2 In addition, the EIA Scoping Opinion, together with a response from National Grid against each point raised by the Planning Inspectorate relevant to Landscape and Visual, is provided in Appendix 5.1: National Grid's response to the EIA Scoping Opinion (document reference 6.5.A1).

13.3.3 Since submission of the EIA Scoping Report (document reference 6.20) and receipt of the EIA Scoping Opinion (document reference 6.20) Special Landscape Areas (SLAs) are no longer identified in Local Plans. Therefore, SLAs are no longer relevant and not considered further in this ES chapter.

Project Engagement and Consultation

13.3.4 Consultation and engagement with relevant stakeholders has informed the assessment presented in this chapter. Responses to representations received during the statutory consultation in summer 2024 are provided in Appendix K and Appendix M of the Consultation Report (document reference 5.1).

13.3.5 A summary of discussions and how these have influenced the Project, scope and the approach to the assessment are provided in Table 13.1.

Table 13.1 Engagement undertaken relevant to Landscape and Visual

Reference	Comment	National Grid's Response
Thematic Group Meeting, July 2022: • Natural England • Suffolk Coast and Heaths and Dedham Vale National Landscape Authorities • Norfolk County Council • South Norfolk and Broadlands District Council • Colchester City Council • Braintree District Council • Essex County Council • Suffolk County Council • Thurrock Council • Basildon Council • Chelmsford City Council	Meeting to discuss and agree the scope of the EIA and share baseline information. The participants provided feedback in relation to: • Study Area – stakeholders asked for further clarification regarding the Study Area extents • Baseline information – stakeholders requested that the East of England Typology was referenced, to provide a baseline which is standardised across the Study Area. National Grid agreed to consider this dataset in the landscape baseline • Baseline information – stakeholders suggested reviewing relevant Neighbourhood Plans to identify key or valued viewpoints. National Grid agreed to review Neighbourhood Plans • Baseline information – stakeholders suggested reviewing the Land of the Fanns study to inform baseline landscape character • Baseline information – stakeholders suggested reviewing the National Landscape special qualities report • ZTV methodology – stakeholders requested clarification on the use of ZTVs and requested graded ZTVs which show the proportion of pylons that would be visible • Effects on residential visual amenity – stakeholders requested that effects on residential visual amenity be considered	• The Study Area to be used for the assessment was agreed with stakeholders and is described in Section 13.4. • Baseline information used to inform the landscape assessment was agreed with stakeholders and is described in Appendix 13.2: Landscape Baseline and Assessment (document reference 6.13.A2) (which includes the East of England Typology, Land of the Fanns study (Alison Farmer Associates, 2016a) and the Dedham Vale AONB and Stour Valley Project Area Management Plan) • A summary of effects across the East of England Typology is provided in Appendix 13.2: Landscape Baseline and Assessment (document reference 6.13.A2) • Baseline information used to inform the visual assessment was agreed with stakeholders and is described in Appendix 13.3: Visual Baseline and Assessment (document reference 6.13.A3) (which includes representative viewpoints, selected after a review of baseline information including Neighbourhood Plans) • The ZTV methodology was agreed with stakeholders and is described in Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1) (which includes graded ZTVs sought by stakeholders) • Effects on residential visual amenity are set out in Appendix 13.4: Residential Visual Amenity Assessment (document reference 6.13.A4)

Reference	Comment	National Grid's Response
	• Cumulative effects – stakeholders requested that cumulative 'wirescape' effects be considered, noting Bramford Substation and the Bramford to Twinstead Project • Pylon design – stakeholders requested further information on the use of T-pylons as an alternative to the standard lattice pylons.	• The potential for 'wirescape' effects with existing overhead lines is considered in Appendix 13.2: Landscape Baseline and Assessment (document reference 6.13.A2). Potential cumulative effects with other developments including Bramford to Twinstead are set out in Chapter 17: Cumulative Effects (document reference 6.17) • The pylon design would comprise steel lattice pylons and low height pylons. The Project design is described in Chapter 4: Project Description (document reference 6.4). T-pylons were considered as part of the Project design development. Further information on the use of T-pylons was included in Appendix C of the 2024 Design Development Report submitted as part of the 2024 statutory consultation.
EIA Viewpoints Meeting, Norfolk, February 2023: • Norfolk County Council • South Norfolk District Council.	The purpose of the meeting was to seek agreement on viewpoint locations in the county of Norfolk. The Local Planning Authorities provided feedback on viewpoint locations at the meeting and in subsequent correspondence.	The viewpoints requested by the Local Planning Authorities were considered and the majority are included in the ES (22 viewpoints in Norfolk, 206 viewpoints in total). The viewpoint assessment is set out in Annex A of Appendix 13.3: Visual Baseline and Assessment (document reference 6.13.A3).
EIA Viewpoints Meeting, Essex, February 2023: • Essex County Council • Essex Place Services • Braintree District Council • Brentwood Borough Council	The purpose of the meeting was to seek agreement on viewpoint locations in the county of Essex. The Local Planning Authorities and Essex Place Services provided feedback on viewpoint locations at the meeting and in subsequent correspondence.	The viewpoints requested by the Local Planning Authorities were considered and the majority are included in the ES (106 viewpoints in Essex, 206 viewpoints in total). The viewpoint assessment is set out in Annex A of Appendix 13.3: Visual Baseline and Assessment (document reference 6.13.A3).

Reference	Comment	National Grid's Response
• Chelmsford City Council • Colchester City Council.		
EIA Viewpoints Meeting, Thurrock, February 2023: • Thurrock Council • Essex Place Services.	The purpose of the meeting was to seek agreement on viewpoint locations in Thurrock. Thurrock and Essex Place Services provided feedback on viewpoint locations at the meeting and in subsequent correspondence.	The viewpoints requested by Thurrock Council were considered and the majority are included in the ES (12 viewpoints in Thurrock, 206 viewpoints in total). The viewpoint assessment is set out in Annex A of Appendix 13.3: Visual Baseline and Assessment (document reference 6.13.A3).
EIA Viewpoints, Suffolk, February 2023: • Suffolk County Council.	The purpose of the meeting was to seek agreement on viewpoint locations in the county of Suffolk. Suffolk County Council provided feedback on viewpoint locations at the meeting and in subsequent correspondence.	The viewpoints requested by Suffolk County Council were considered and the majority are included in the ES (66 viewpoints in Suffolk, 206 viewpoints in total). The viewpoint assessment is set out in Annex A of Appendix 13.3: Visual Baseline and Assessment (document reference 6.13.A3).
EIA Viewpoints Meeting, Norfolk, May 2023: • Norfolk County Council • South Norfolk Council.	The purpose of the meeting was to present and discuss National Grid's response to viewpoint location feedback from the February meeting. Details of revised and additional viewpoints were presented, based on the feedback. The Local Planning Authorities provided feedback on updated and additional viewpoint locations at the meeting and in subsequent correspondence. The proposed approaches to the production of the ZTVs and visualisations for the Preliminary Environmental Information Report (PEIR) and ES (Volume 6 of the DCO application) were also presented and discussed.	Additional viewpoint location feedback was considered and the majority of suggestions are included in the ES (22 viewpoints in Norfolk, 206 viewpoints in total). The viewpoint assessment is set out in Annex A of Appendix 13.3: Visual Baseline and Assessment (document reference 6.13.A3).
EIA Viewpoints Meeting, Essex, May 2023:	The purpose of the meeting was to present and discuss National Grid's response to viewpoint	Additional viewpoint location feedback was considered and the majority of suggestions are included in the ES

Reference	Comment	National Grid's Response
• Essex County Council • Basildon Council • Braintree District Council • Brentwood Borough Council • Chelmsford City Council • Colchester City Council.	location feedback from the February meeting. Details of revised and additional viewpoints were presented, based on the feedback. The Local Planning Authorities provided feedback on updated and additional viewpoint locations at the meeting and in subsequent correspondence. The proposed approaches to the production of the ZTVs and visualisations for the PEIR and ES (Volume 6 of the DCO application) were also presented and discussed.	(106 viewpoints in Essex, 206 viewpoints in total). The viewpoint assessment is set out in Annex A of Appendix 13.3: Visual Baseline and Assessment (document reference 6.13.A3).
EIA Viewpoints Meeting, Thurrock, May 2023: • Thurrock Council.	The purpose of the meeting was to present and discuss National Grid's response to viewpoint location feedback from the February meeting. Details of revised and additional viewpoints were presented, based on the feedback. Thurrock Council provided feedback on updated and additional viewpoint locations at the meeting and in subsequent correspondence. The proposed approaches to the production of the ZTVs and visualisations for the PEIR and ES (Volume 6 of the DCO application) were also presented and discussed.	Additional viewpoint location feedback was considered further and the majority of suggestions are included in the ES (12 viewpoints in Thurrock, 206 viewpoints in total). The viewpoint assessment is set out in Annex A of Appendix 13.3: Visual Baseline and Assessment (document reference 6.13.A3).
EIA Viewpoints Meeting, Suffolk, May 2023: • Suffolk County Council • Babergh District Council and Mid Suffolk District Council.	The purpose of the meeting was to present and discuss National Grid's response to viewpoint location feedback from the February meeting. Details of revised and additional viewpoints were presented, based on the feedback. The Local Planning Authorities provided feedback on updated and additional viewpoint locations at the meeting and in subsequent correspondence.	The additional viewpoint location feedback was considered further and the majority of suggestions are included in the ES (66 viewpoints in Suffolk, 206 viewpoints in total). The viewpoint assessment is set out in Annex A of Appendix 13.3: Visual Baseline and Assessment (document reference 6.13.A3).

Reference	Comment	National Grid's Response
	The proposed approaches to the production of the ZTVs and visualisations for the PEIR and ES (Volume 6 of the DCO application) were also presented and discussed.	
Correspondence undertaken by email between May 2023 and March 2024: • Norfolk County Council • South Norfolk Council • Suffolk County Council • Babergh District Council and Mid Suffolk District Council • Essex County Council • Tendring District Council • Basildon Council • Braintree District Council • Brentwood Borough Council • Chelmsford City Council • Colchester City Council • Thurrock Council • Suffolk Coast and Heaths and Dedham Vale National Landscape Authorities.	The purpose of the ongoing correspondence was to share information, respond to viewpoint location feedback received after May 2023 meetings, and to review subsequent ongoing feedback up until March 2024 with the aim to agree viewpoint locations for PEIR and ES (Volume 6 of the DCO application) and also take into account potential additional locations for the ES.	The ongoing additional viewpoint location feedback was considered further in the selection of viewpoints for the ES (Volume 6 of the DCO application), and the majority are included in the ES (206 viewpoints in total). The viewpoint assessment is set out in Annex A of Appendix 13.3: Visual Baseline and Assessment (document reference 6.13.A3).

Reference	Comment	National Grid's Response
Optional landscape thematic workshops, May 2024: • Norfolk County Council • South Norfolk Council • Suffolk County Council • Babergh District Council and Mid Suffolk District Council • Essex County Council • Tendring District Council • Basildon Council • Braintree District Council • Brentwood Borough Council • Chelmsford City Council • Colchester City Council • Thurrock Council	Meetings to provide stakeholders with an opportunity to raise queries in relation to the Landscape and Visual assessment presented in the PEIR at statutory consultation (National Grid, 2024).	Stakeholder feedback has been taken into account in this chapter and supporting appendices.
Landscape thematic workshops in relation to the new EACN Substation, May 2024: • Essex County Council • Tendring District Council • Suffolk Coast and Heaths and Dedham Vale National Landscape Authorities.	Meetings to discuss landscape queries raised by stakeholders in relation to the new EACN Substation.	Stakeholder feedback has been taken into account in this chapter and its appendices.

Reference	Comment	National Grid's Response
Landscape thematic workshops, July 2024: • Suffolk County Council • Babergh District Council and Mid Suffolk District Council.	Meeting to discuss landscape queries raised by stakeholders in response to the PEIR submitted to support the statutory consultation.	Stakeholder feedback has been taken into account in this chapter and its appendices.
Landscape thematic workshop (all stakeholders), September 2024: • Norfolk County Council • South Norfolk Council • Suffolk County Council • Essex County Council • Essex Place Services • Basildon Council • Brentwood Borough Council • Colchester City Council • Thurrock Council.	Meeting to present the LVIA methodology. Written responses were provided by stakeholders after the workshop. A summary of feedback during the meeting is provided below: • Landscape value – stakeholders requested that a Valued Landscape Assessment was carried out, in line with guidance from the Landscape Institute, 2021 • Value of views – stakeholders requested that there is recognition of the value of views not within designated landscapes or recognised in plans • Approach to visual assessment – stakeholders suggested that the visual assessment should be based on LCTs/LCAs, rather than the Visual Receptor Areas proposed • Negligible and No Effect – stakeholders requested that these judgements are separated out in the LVIA methodology • Mitigation and compensation – stakeholders requested further information about wider landscape mitigation and compensation for significant effects	Stakeholder feedback has been taken into account in this chapter and its appendices. • Landscape value – an appraisal of landscape value was undertaken and is provided in Annex A of Appendix 13.2: Landscape Baseline and Assessment (document reference (document reference 6.13.A2). This is not a full Valued Landscape Assessment but adopts the criteria within Landscape Institute guidance, 2021, which National Grid consider to be appropriate for the Project • Value of views – the LVIA methodology was updated to include views of 'Local / Community' value, as set out in Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1) • Approach to visual assessment – the visual assessment is based on Visual Receptor Areas and the rationale for this is set out in Appendix 13.3: Visual Baseline and Assessment (document reference (document reference 6.13.A3) • Negligible and No Effect – judgements are separated out as set out in Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1) • Mitigation and compensation – mitigation around substations, substation extensions and CSE

Reference	Comment	National Grid's Response
	• Furthering the purposes of National Landscapes – stakeholders requested that reference to the Levelling-up and Regeneration Act 2023 is made in the LVIA.	compounds is detailed in the Outline Landscape and Ecological Management Plan (LEMP) (document reference 7.4). National Grid has committed to a 3:1 replacement for individual trees and trees within groups. The tree planting strategy would prioritise replanting within the Order Limits, although offsite provision may be required. Offsite tree planting is considered to be landscape compensation. Further detail is provided in the Outline LEMP (document reference 7.4). Additional planting may be considered within the Order Limits at detailed design stage, in locations such as around the new Tilbury North Substation and the permanent access roads to the EACN and Tilbury North CSE compounds • Furthering the purposes of National Landscapes – further detail is provided in National Landscapes – Duty to Seek to Further the Purposes Report (s85 Countryside and Rights of Way Act 2000) (document reference 5.10).
Landscape thematic workshop (Norfolk), September 2024: • Norfolk County Council • South Norfolk Council.	Meeting to present the LVIA methodology and proposed viewpoints. Written responses were provided by stakeholders after the workshop. A summary of feedback during the meeting is provided below: • Stakeholders requested that a viewpoint at Bressingham Steam Museum be included in the LVIA.	The feedback on the LVIA methodology was incorporated into Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1). The additional viewpoint location feedback was considered further in the selection of viewpoints for the LVIA. The LVIA viewpoints are listed in Appendix 13.3: Visual Baseline and Assessment (Annex A: Viewpoint Assessment) (document reference 6.13.A3). • Bressingham Steam Museum is included as Viewpoint 1.19 and a photomontage is shown on Figure 7.12.F19 (document reference 7.12).

Reference	Comment	National Grid's Response
Landscape thematic workshops (Essex North), September 2024: • Essex County Council • Essex Place Services • Brentwood Borough Council • Colchester City Council • Suffolk Coast and Heaths and Dedham Vale National Landscape Authorities.	Meeting to present the LVIA methodology and proposed viewpoints. Written responses were provided by stakeholders after the workshop.	The feedback on the LVIA methodology was incorporated into Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1). The additional viewpoint location feedback was considered further in the selection of viewpoints for the LVIA. The LVIA viewpoints are listed in Appendix 13.3: Visual Baseline and Assessment (Annex A: Viewpoint Assessment) (document reference 6.13.A3).
Landscape thematic workshop (Essex South and Thurrock), September 2024: • Essex Place Services • Thurrock Council.	Meeting to present the LVIA methodology and proposed viewpoints. Written responses were provided by stakeholders after the workshop.	The feedback on the LVIA methodology was incorporated into Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1). The additional viewpoint location feedback was considered further in the selection of viewpoints for the LVIA. The LVIA viewpoints are listed in Appendix 13.3: Visual Baseline and Assessment (Annex A: Viewpoint Assessment) (document reference 6.13.A3).
Landscape thematic workshop (Suffolk), October 2024: • Suffolk County Council • Babergh District Council and Mid Suffolk District Council	Meeting to present the LVIA methodology and proposed viewpoints. Written responses were provided by stakeholders after the workshop.	The feedback on the LVIA methodology was incorporated into Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1). The additional viewpoint location feedback was considered further in the selection of viewpoints for the LVIA. The LVIA viewpoints are listed in Appendix 13.3: Visual Baseline and Assessment (Annex A: Viewpoint Assessment) (document reference 6.13.A3).

Reference	Comment	National Grid's Response
• Suffolk Coast and Heaths and Dedham Vale National Landscape Authorities.		
Stakeholder workshop on the Outline LEMP (document reference 7.4) and Outline Code of Construction Practice (CoCP) (document reference 7.2): • Norwich City Council • Norfolk County Council • South Norfolk Council • Suffolk County Council • Essex County Council • Tendring District Council • Basildon Council • Braintree District Council • Brentwood Borough Council • Colchester City Council • Thurrock Council.	Meeting to discuss stakeholder feedback on the Outline LEMP (document reference 7.4) and Outline CoCP (document reference 7.2) (which contain landscape mitigation). The documents were circulated before the meeting.	The feedback on the Outline LEMP (document reference 7.4) and Outline CoCP (document reference 7.2) was taken into account and incorporated where feasible.
Focus meeting on National Landscapes, October 2024: • Essex County Council • Suffolk County Council • Colchester City Council	Meeting to introduce the setting study undertaken for Dedham Vale National Landscape, to discuss viewpoints within the National Landscape and to discuss potential effects and mitigation within the National Landscape.	The assessment of effects on Dedham Vale National Landscape is presented in Appendix 13.5: National Landscape Assessment Study (document reference 6.13.A5). The setting study is included in Annex A: Dedham Vale National Landscape Setting Study.

Reference	Comment	National Grid's Response
• Natural England.		Mitigation is discussed further in Section 13.6 of this chapter.
Landscape thematic workshops, November 2024: • Suffolk County Council • Babergh and Mid Suffolk District Council.	Meeting to provide feedback on consultee comments received on the LVIA methodology and viewpoints, following the workshop in October 2024.	The feedback on the LVIA methodology was incorporated into Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1). The additional viewpoint location feedback was considered further in the selection of viewpoints for the LVIA. The LVIA viewpoints are listed in Appendix 13.3: Visual Baseline and Assessment (Annex A: Viewpoint Assessment) (document reference 6.13.A3).
Landscape thematic workshops, November 2024: • Braintree District Council • Tendring District Council • Colchester City Council • Essex Place Services (representing Colchester and Tendring).	Meeting to provide feedback on consultee comments received on the LVIA methodology and viewpoints, following the workshop in September 2024.	The feedback on the LVIA methodology was incorporated into Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1). The additional viewpoint location feedback was considered further in the selection of viewpoints for the LVIA. The LVIA viewpoints are listed in Appendix 13.3: Visual Baseline and Assessment (Annex A: Viewpoint Assessment) (document reference 6.13.A3).
Landscape thematic workshops, November 2024: • Brentwood Borough Council • Essex Place Services • Chelmsford City Council • Basildon Council.	Meeting to provide feedback on consultee comments received on the LVIA methodology and viewpoints, following the workshop in September 2024.	The feedback on the LVIA methodology was incorporated into Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1). The additional viewpoint location feedback was considered further in the selection of viewpoints for the LVIA. The LVIA viewpoints are listed in Appendix 13.3: Visual Baseline and Assessment (Annex A: Viewpoint Assessment) (document reference 6.13.A3).

Reference	Comment	National Grid's Response
Landscape thematic workshops, December 2024: • Norfolk County Council • South Norfolk Council.	Meeting to provide feedback on consultee comments received on the LVIA methodology and viewpoints, following the workshop in September 2024.	The feedback on the LVIA methodology was incorporated into Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1). The additional viewpoint location feedback was considered further in the selection of viewpoints for the LVIA. The LVIA viewpoints are listed in Appendix 13.3: Visual Baseline and Assessment (Annex A: Viewpoint Assessment) (document reference 6.13.A3).
Stakeholder workshop on the second iteration of the Outline LEMP (document reference 7.4) and Outline CoCP (document reference 7.2), January 2025: • Norfolk County Council • South Norfolk Council • Suffolk County Council • Essex County Council • Essex Place Services • Tendring District Council • Braintree District Council • Brentwood Borough Council • Chelmsford City Council • Colchester City Council • Thurrock Council.	Meeting to discuss stakeholder feedback on the second iteration of the Outline LEMP (document reference 7.4) and CoCP (document reference 7.2), the contents of which were circulated before the meeting.	The feedback on the Outline LEMP (document reference 7.4) and Outline CoCP (document 7.2) was taken into account and incorporated where feasible.
Landscape thematic workshops in relation to the	Meeting to discuss proposals around the new Tilbury North Substation in relation to potential Landscape and Visual effects, following on from	• An additional viewpoint was included on Hoford Road, south of the new Tilbury North Substation

Reference	Comment	National Grid's Response
new Tilbury North Substation, April 2025: • Thurrock Council.	targeted consultation. In their targeted consultation response Thurrock Council requested: • An additional viewpoint south of the new Tilbury North Substation • Landscape mitigation around the new Tilbury North Substation and Tilbury North (Warley side) and Tilbury North (Tilbury side) CSE compounds.	(see Annex A in Appendix 13.3: Visual Baseline and Assessment (document reference 6.13.A3) • Landscape mitigation around the new Tilbury North Substation and Tilbury North (Warley side) and Tilbury North (Tilbury side) CSE compounds is detailed in Appendix D of the Outline LEMP (document reference 7.4). Additional planting may be considered within the Order Limits at detailed design stage, in locations such as around new Tilbury North Substation and the permanent access road to Tilbury North CSE compounds.

13.4 EIA Approach and Methods

13.4.1 This section describes the methodology used to establish the existing and future baseline together with the methodology/approach used to undertake the assessment on Landscape and Visual. The overarching approach is also described in Chapter 5: EIA Approach and Method (document reference 6.5).

Data Sources

13.4.2 The baseline was informed by desk study data which has drawn on the following information sources:

- Landscape Character Assessment (LCA)
  - National Character Area profiles (Natural England, 2014a)
  - National Historic Landscape Characterisation Project (Natural England, 2025)
  - East of England Landscape Typology (Landscape East, 2010)
  - South Norfolk District LCA (Land Use Consultants (LUC), 2001)
  - Breckland Landscape and Settlement Character Assessment (Tibbalds and LUC, 2022)
  - Suffolk LCA (Suffolk County Council, 2010)
  - Tendring District LCA (LUC, 2001)
  - Colchester Borough LCA (Chris Blandford Associates (CBA), 2005)
  - Braintree, Brentwood, Chelmsford, Maldon and Uttlesford LCAs (CBA, 2006)
  - Essex LCA (CBA, 2003)
  - LCA of Basildon Borough (The Landscape Partnership, 2014)
  - Thurrock Integrated Landscape Character Assessment (LUC, 2018)
  - Land of the Fanns, LCA (Alison Farmer Associates, 2016a)
  - Waveney Valley Valued Landscape Assessment (Alison Farmer Associates, 2024)
  - Joint Babergh and Mid Suffolk District Council Landscape Guidance (Babergh and Mid Suffolk District Council, 2015)
- Designated landscape publications
  - The Dedham Vale Landscape (Landscape Design Associates for the Countryside Commission, 1997)
  - Dedham Vale AONB Natural Beauty and Special Qualities and Perceived and Anticipated Risks (Alison Farmer Associates, 2016b)
  - Dedham Vale AONB and Stour Valley Project Area Management Plan 2021-26 (Dedham Vale AONB and Stour Valley Project Area Partnership, 2021)

  - Dedham Vale National Landscape and Stour Valley Management Plan 2026-2031 – Consultation Draft (Dedham Vale National Landscape and Stour Valley Partnership, 2025)
  - Dedham Vale AONB and Stour Valley Project Area State of the AONB Report 2018 (LUC, 2019)
- Ordnance Survey (OS) Maps
  - 1:250,000 scale
  - Landranger 1:50,000 scale
  - Explorer 1:25,000 scale
- Open-source GIS data
- Online map search engines
  - Bing, mapping website (Online – Available at: www.bing.com/maps)
  - Google, mapping website (Online – Available at: www.maps.google.com)
- Data Used for Digital Terrain Modelling (DTM)
  - LiDAR DTM data (2 m resolution with ±15 cm root-mean-square error (RMSE))
  - Screening objects were incorporated into the DTM using National Inventory of Woodland and Trees for England and OS Vector Map Building data
  - OS Terrain® 5 mid-resolution height data (DTM) (5 m grid spacing, 2.5 m RMSE)
  - OS Terrain® 50 mid-resolution height data (DTM) (50 m grid spacing, 4 m RMSE).

Study Area

13.4.3 The LVIA Study Area is determined by the nature and scale of the Project and the nature of the surrounding area, and considers the landscape and/ or views from where there is the potential for a significant effect to arise as a result of the Project.

13.4.4 The EIA Scoping Report (document reference 6.19) proposed that the Study Area for the ES (Volume 6 of the DCO application) would comprise 3 km and 1 km distance from the Order Limits for the overhead lines and CSE compounds / new EACN Substation and underground cable route(s), respectively. The Planning Inspectorate stated in their EIA Scoping Opinion (document reference 6.20), '...*that the Study Area and ZTV should represent the extent of the likely impacts from all phases of the Proposed Development (including construction, maintenance and decommissioning) and should encompass long views from within the Dedham Vale AONB*'.

13.4.5 The LVIA Study Area was reviewed in light of feedback received during statutory consultation in summer 2024 and subsequent consultations in 2025, ongoing site surveys, and following the production of updated ZTVs as the Project has developed.

13.4.6 Table 13.2 provides a more detailed breakdown of Study Area by Project elements and the rationale behind it. The Landscape and Visual Study Area is also shown on Figure 13.1: LVIA Study Area and Landscape Designations (document reference 6.13.F1).

Table 13.2 LVIA Study Area

Project Element	Study Area	Rationale
400 kV overhead line0(including all associated third-party works except 132 kV overhead line removal and undergrounding)	3 km from lateral Limits of Deviation (LoD) for the 400 kV overhead line (*with some viewpoints considered up to 5 km*)	The LVIA Study Area was informed by consultation, field work and professional experience of working on other overhead line proposals. Professional experience of assessments of overhead lines (the tallest element of the Project) and field assessment have shown that there are circumstances when a steel lattice pylon approximately 50 m high can be discerned at distances up to 10 km, for example from an open and elevated viewpoint. However, in most instances the perception of overhead lines beyond 3 km is likely to be relatively limited and beyond 5 km barely perceptible and therefore unlikely to give rise to significant effects. This is because at 3 km distance, when viewed beside a ruler held at arm's length, a 50 m tall pylon would appear to be approximately 1 cm high in the landscape and at a 5 km distance approximately 6 mm high. This is known as the apparent height of the pylon. Some more distant viewpoints up to 5 km from the Project are considered where there is the potential for significant visual effects to arise beyond the 3 km Study Area.
Substation extension at Bramford	3 km from lateral / longitudinal LoD	The Project proposes to extend the existing substation at Bramford. Any new infrastructure would not be taller than the existing substation. A 3 km Study Area which ties into that considered for the 400 kV overhead line is considered more than adequate.
New EACN and Tilbury North Substations	3 km from lateral / longitudinal LoD	The Project proposes a new EACN Substation and new Tilbury North Substation. The tallest elements of the substations would be no higher than 15 m. A 3 km Study Area which ties into that considered for the 400 kV overhead line is considered more than adequate.
New EACN Substation permanent access road	1 km from lateral LoD	Proposed construction of the access would be at ground level and the majority of the proposals would involve improvements to an existing carriageway along Bentley Road. A 1 km Study Area is considered adequate to identify and report on significant Landscape and Visual effects.

Project Element	Study Area	Rationale
400 kV CSE compounds	3 km from lateral / longitudinal LoD	The Project proposes a number of new CSE compounds that connect to the proposed 400 kV overhead line. The tallest elements of the CSE compounds would be no higher than 15 m. A 3 km Study Area which ties into that considered for the 400 kV overhead line is considered more than adequate.
275 kV CSE compounds at Tilbury North Substation	3 km from lateral / longitudinal LoD	The Project proposes new 275 kV CSE compounds that connect to an existing 275 kV overhead line. The tallest elements of the CSE compounds would be no higher than 15 m. A 3 km Study Area which ties into that considered for the adjacent 400 kV overhead line alterations is considered more than adequate.
Underground cable route	3 km from lateral LoD	Proposed construction of 400 kV underground cables would be at ground level. The Study Area was increased to 3 km in response to stakeholder feedback, to identify and report on significant Landscape and Visual effects.
132 kV overhead line removal (a component of the third-party works)	2 km from lateral LoD	Proposed construction activities related to the removal of 132 kV overhead lines (a component of the third-party works) would involve removal of steel lattice pylons approximately 30 m high. Professional experience of assessments of overhead lines and field assessment have shown that there are circumstances when a steel lattice pylon approximately 30 m high can be discerned at distances up to 6 km, for example from an open and elevated viewpoint. However, in most instances the perception of 132 kV overhead lines beyond 1.8 km is likely to be relatively limited and beyond 3 km barely perceptible and therefore unlikely to give rise to significant effects. This is because at 1.8 km distance, when viewed at arm's length, a 30 m tall pylon would appear to be approximately 1 cm high in the landscape and at a 3 km distance approximately 6 mm high. This is known as the apparent height of the pylon.
132 kV underground cable route (a component of the third-party works)	1 km from lateral LoD	Proposed construction of 132 kV underground cables would be at ground level. A 1 km Study Area is considered adequate to identify and report on significant Landscape and Visual effects.

Site Survey

13.4.7 Desk studies were supplemented by field survey work which was carried out during multiple visits under differing weather conditions between 2022 and 2025 (in all seasons). Records were made in the form of field notes and photographs. Field survey work included visits to the Order Limits, viewpoints and designated landscapes, and extensive travel around the Study Area to consider likely effects on landscape character and on experiences of views seen from designated landscapes,

settlements / communities, and routes. Field work was undertaken in all seasons to fully understand the maximum level of visibility as part of the Landscape and Visual baseline. Baseline photography was captured from all assessment viewpoints and is shown alongside visualisations of the Project on Figures 7.12.F1 to 7.12.F205 (document reference 7.12).

Assessment Methodology

13.4.8 This section sets out the methodology used for assessing the effects on Landscape and Visual receptors for those aspects scoped into the assessment, as set out within the EIA Scoping Report (document reference 6.19) and agreed in the EIA Scoping Opinion (document reference 6.20) and any additional aspects agreed to be assessed with stakeholders. The scope of the Landscape and Visual assessment is provided in Appendix 5.2: Scope of the Assessment (document reference 6.5.A2).

13.4.9 The full LVIA methodology is set out in Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1).

13.4.10 The assessment in this chapter assumes that all mitigation – embedded (design measures), standard practice, and any additional mitigation measures where required (as defined in Chapter 4: Project Description (document reference 6.4) are in place before assessing the effects. This is in accordance with guidance from IEMA as part of preparing a proportional assessment (IEMA, 2022) and the EIA Scoping Report (document reference 6.19).

Methodological Overview

13.4.11 The key steps in the methodology for assessing Landscape and Visual effects was as follows:

- The landscape of the Study Area was analysed, and landscape receptors identified, informed by desk study and field survey. Landscape receptors are LCTs, LCAs, and designated landscapes
- The area over which the development would potentially be visible was established through the creation of ZTV plans (see Figures 13.8 to 13.19 (document reference 6.13.F8 – 6.13.F19)[1]
- The visual baseline was recorded in terms of the different receptors (groups of people) who may experience views of the Project (informed by the initial ZTV) and the nature of their existing views and visual amenity

13.4.12 Potential assessment viewpoints were selected, as advocated by GLVIA3 (Landscape Institute and IEMA, 2013) to represent a range of different receptors and views, in consultation with stakeholders including Local Planning Authorities as set out in Table 13.1:

> *'1. representative viewpoints, selected to represent the experience of different types of visual receptor, where larger numbers of viewpoints cannot all be included individually and where the significant effects are unlikely to differ – for example, certain points may be chosen to represent the views of users of particular public footpaths and bridleways;*

[1] A ZTV indicates areas from where a development is theoretically visible, but does not show what the Project would look like, nor indicate the nature or magnitude of landscape or visual impacts.

2. specific viewpoints, chosen because they are key and sometimes promoted viewpoints within the landscape, including for example specific local visitor attractions, viewpoints in areas of particularly noteworthy visual and/or recreational amenity such as landscapes with statutory landscape designations, or viewpoints with particular cultural landscape associations;

3. illustrative viewpoints, chosen specifically to demonstrate a particular effect or specific issues, which might, for example, be the restricted visibility at certain locations.' (GLVIA3, Para 6.19, Page 109)

- Likely significant effects on both the landscape as a resource and visual receptors, were identified
- The level (and significance) of Landscape and Visual effects was judged with reference to the nature of the receptor and the nature of the effect. The nature of the receptor (commonly referred to as the sensitivity of the receptor), considers both susceptibility and value. The nature of the effect (commonly referred to as the magnitude of effect), considers a combination of judgements including size/scale, geographical extent, duration and reversibility.

Sensitivity of Landscape Receptors

13.4.13 In accordance with GLVIA3 (Landscape Institute and IEMA, 2013) the sensitivity of a landscape receptor to change was based on weighing up professional judgements regarding susceptibility and value (GLVIA3, Para 5.39, Page 88), as set out in Table 13.3.

Table 13.3 Sensitivity of landscape receptors

	Higher	⟷	Lower
Susceptibility	Attributes that make up the character of the landscape offer very limited opportunities for the accommodation of change without key characteristics being fundamentally altered by electricity transmission infrastructure, leading to a different landscape character.	⟷	Attributes that make up the character of the landscape are resilient to being changed by electricity transmission infrastructure.
Value	Landscapes with clear evidence of natural heritage, cultural heritage and cultural associations, in good physical condition, with recreational opportunities, a strong sense of distinctiveness and strong perceptual qualities and with qualities that contribute to the healthy functioning of the landscape.	⟷	Landscapes with no or limited evidence of natural heritage, cultural heritage and cultural associations, in poor physical condition, with few recreational opportunities, a weak or negative sense of place, with weak perceptual qualities and lacking in qualities that contribute to the healthy functioning of the landscape.

	Higher	⟷	Lower
	Areas or features designated at a national level e.g. National Parks or National Landscapes or key features of these with national policy level protection.		Areas or features that are not formally designated.

Sensitivity of Visual Receptors

13.4.14 In accordance with GLVIA3 the sensitivity of a visual receptor to change is based on weighing up professional judgements regarding susceptibility and value (GLVIA3, Para 6.31, Page 113), as set out in Table 13.4.

Table 13.4 Sensitivity of visual receptors

	Higher	⟷	Lower
Susceptibility	Viewers whose attention or interest is focused on their surroundings, including settlements, individual residential receptors[2], people engaged in outdoor recreation, visitors to heritage assets or other attractions where views of surrounding area an important contributor.	⟷	People whose attention is not focussed on their surroundings (and where the appreciation of views is secondary to the activity or period of exposure)) such as commuters, people engaged in outdoor sports that does not focus on an appreciation of the landscape and people at their place of work.
Value	Views may be recorded in management plans, guidebooks, and/or which are likely to be experienced by large numbers of people. Views may be associated with internationally or nationally designated landscapes; designed views recorded in citations for registered parks and gardens/scheduled monuments, etc.	⟷	Views which are not documented or protected. Views which are more incidental, and less likely to be associated with somewhere people travel to or stop, or which may be experienced by smaller numbers of people.

Magnitude of Landscape Effects

13.4.15 The overall judgement of magnitude of a landscape effect is based on combining professional judgements on size and scale, geographical extent, duration and reversibility, as set out in Table 13.5.

[2] Consideration of changes in views experience from private residencies informed by the approach detailed in Landscape Institute Technical Guidance Note 2/19 Residential Visual Amenity Assessment (RVAA)

Table 13.5 Magnitude of landscape effects

	Higher	⟷	Lower
Size/scale	Extensive loss of landscape features and/or elements, and/or change in, or loss of key landscape characteristics, and/or creation of new key landscape characteristics	⟷	Limited loss of landscape features and/or elements, and/or change in or loss of some secondary landscape characteristics
Geographical extent	Change in landscape features and/or character extending considerably beyond the immediate site and potentially affecting multiple landscape character types/areas	⟷	Change in landscape features and/or character contained within or local to the immediate site and affecting only a small part of the landscape character type/area
Duration	Changes experienced for a period of around five years or more	⟷	Changes experienced for a shorter period of up to five years
Reversibility	Change to features, elements or character which cannot be undone or is only partly reversible after a long period	⟷	A temporary landscape change which is largely reversible following the completion of construction, or decommissioning of the development

Magnitude of Visual Effects

13.4.16 The overall judgement of the magnitude of visual effect (nature of visual effect) is based on professional judgements on size and scale, geographical extent, duration and reversibility, as set out in Table 13.6.

Table 13.6 Magnitude of visual effects

	Higher	⟷	Lower
Size/scale	A large visual change resulting from the Project is the most notable aspect of the view, perhaps as a result of the development being in close proximity, or because a substantial part of the view is affected, or because the development introduces a new focal point and/or provides contrast with the existing view and/or changes the scenic qualities of the view.	⟷	A small (or some) visual change resulting from the Project as a minor or generally unnoticed aspect of the view, perhaps as a result of the development being in the distance, or because only a small part of the view is affected, and/or because the development does not introduce a new focal point or contrast with the existing view and/or does not change the scenic qualities of the view.

	Higher	⟷	Lower
Geographical extent	The assessment location is clearly representative of similar visual effects over an extensive geographic area.	⟷	The assessment location clearly represents a small geographic area.
Duration	Visual change experienced over around five years or more.	⟷	Visual change experienced over a short period of up to five years.
Reversibility	A permanent visual change which is not reversible or only partially reversible following decommissioning of the Project.	⟷	A temporary visual change which is largely reversible following the completion of construction or decommissioning of the Project.

Significance

13.4.17 The final step in the assessment requires the judgements of sensitivity and magnitude of effect to be combined to make an informed professional assessment on the significance of each landscape or visual effect. This determination requires the application of professional judgement and experience to take on board the many different variables which need to be considered, and which are given different weight according to site-specific and location-specific considerations in every instance. Judgements were guided by the principles illustrated in Image 1 in Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1).

13.4.18 Levels of effect are identified as no effect, negligible, minor, moderate or major and are described in Table A13.1.7 (landscape effects) and Table A13.1.12 (visual effects) in Appendix 13.1: Landscape and Visual Methodology (document reference 6.13.A1). Likely significant effects, in the context of the Infrastructure Planning (EIA) Regulations 2017 (the 'EIA Regulations'), are considered to be effects of moderate or greater significance.

Limitations of Assessment

13.4.19 It is considered that there is sufficient information to enable a robust assessment in relation to the identification and assessment of likely significant environmental effects on landscape and views and visual amenity. No additional information is required to inform a robust baseline and undertake the assessment.

Key Parameters for Assessment and Assumptions

13.4.20 This section describes the key parameters and assumptions that have been used / made when undertaking the assessment presented within this chapter.
The assumptions this chapter is based on are listed below:

- Vegetation loss: The assessment is based on the vegetation clearance assumptions set out in Chapter 4: Project Description (document reference 6.4) and presented on the Trees and Hedgerows to be Removed and or Managed Plans (document reference 2.16)
- Reinstatement: Habitat removed during the construction would be reinstated (with the exception of planting restrictions associated with operational requirements as identified within the Outline LEMP (document reference 7.4). National Grid has

committed to a 3:1 replacement for individual trees and trees within groups. The tree planting strategy will prioritise replanting within the Order Limits, although offsite provision may be required

- Night working: Although most of the works would be expected to occur during normal daytime hours, there may be activities that require night-time working. It is assumed this may include trenchless crossings, as once the works have started, it may not be feasible to stop such works until completed. As such, it is assumed that there is potential for night-time works at all trenchless crossing locations. Additionally, in practice, drilling would occur in one direction, with the plant (and therefore the main noise source) located on one side of the crossing only, but it is assumed that drilling may occur in either direction as a worst-case
- Lighting: The following lighting details are assumed:
  - All works associated with substation – exterior and interior lighting would be provided at the site to allow for safe movement and the operation of equipment. All lighting would be designed in accordance with the appropriate design standards and be motion-sensor activated
  - A typical construction day would consist of 12 hours. In winter this would require working in the dark at either end of the day. For the purposes of the ES (Volume 6 of the DCO application), it is therefore assumed that winter working would require lighting at certain sites but this would not apply Project-wide
- Piling assumptions: Some pylon locations, all CSE compounds and both substations may require percussive piling. As a reasonable worst-case scenario, it is assumed that piling would be required at all of these locations
- Trenchless crossing construction methodology: the Project has committed to undertaking trenchless crossings at the following five locations (all within Section C): Higham Road, River Stour (north part), River Stour (south part), A12 highway crossing and railway crossing (east of Ardleigh).

13.5 Baseline Conditions

Existing Baseline

13.5.1 Baseline conditions have been gathered from both desk-based information and site surveys (see Section 13.4) and presented with reference to the section of the Project within which they are located.

13.5.2 The following text provides an overview of the landscape character, designated landscapes and visual receptors / views within the 3 km Study Area. More detailed information on the baseline environment can be found within the appendices which accompany this chapter and are referenced below.

Section A – South Norfolk

Landscape Character

13.5.3 Section A is located mainly within the South Norfolk and High Suffolk Claylands National Character Area (NCA) (83), between Norwich in the north and Diss in the

south (shown on Figure 13.5: National Character Areas and East of England Typology (document reference 6.13.F5)). The landscape comprises a flat to gently undulating plateau, dissected by river valleys including the valleys of the River Tas and River Waveney (shown on Figure 13.2: Landform and Drainage (document reference 6.13.F2)). The River Waveney is characterised by its relatively large-scale open valley landscape. The valley is flat and low-lying, with regular pastoral fields and dense tree and scrub cover. The settlement of Diss / Roydon occupies part of the valley. In terms of the East of England Typology, the plateau is characterised as part of the Settled Plateau Claylands Landscape Character Type (LCT) and Wooded Plateau Claylands LCT, the latter containing a higher proportion of woodland (shown on Figure 13.3: Trees and Woodland (document reference 6.13.F3)). The tributary valleys are classified as Valley Meadowlands LCT along the valley floors, with Valley Settled Farmlands LCT on the valley sides.

Designated Landscapes

13.5.4 There are no designated landscapes within Section A.

Visual Receptors and Views

13.5.5 Visual receptors are shown on Figure 13.7: Visual Receptors and Viewpoints (document reference 6.13.F7). For the purposes of this assessment, visual receptors have been grouped into Visual Receptor Areas (VRAs). The larger settlements / communities are Mulbarton, Forncett End and Diss / Roydon as shown on Figure 13.4: Settlements and Infrastructure (document reference 6.13.F4). The A47, A140 and A1066 pass through the Study Area, in proximity to Norwich, and there is an extensive network of B-roads and minor roads. There is a network of PRoWs and long-distance routes including the Boudicca Way and Angles Way. Although a well-wooded landscape, from the elevated plateau there are frequent longer views. Within valleys, views are often contained by the enclosing landform and/or trees and hedgerows. Baseline photographs for representative viewpoints in Section A are shown on Figures 7.12.F1 to 7.12.F22 (document reference 7.12).

Section B – Mid Suffolk

Landscape Character

13.5.6 Section B is located within the South Norfolk and High Suffolk Claylands NCA (83) and South Suffolk and North Essex Clayland NCA (86), between Diss in the north and Bramford in the south, as shown on Figure 13.5: National Character Areas and East of England Typology (document reference 6.13.F5). The landscape comprises a flat to gently undulating plateau, dissected by tributary streams including the River Waveney and River Gipping, as shown on Figure 13.2: Landform and Drainage (document reference 6.13.F2). In terms of the East of England Typology, the plateau is characterised as part of the Settled Plateau Claylands LCT and Wooded Plateau Claylands LCT, the latter containing a higher proportion of woodland, as shown on Figure 13.3: Trees and Woodland (document reference 6.13.F3). The tributary valleys which dissect the plateau are classified as Valley Meadowlands LCT along the valley floors, with Valley Settled Farmlands LCT on the valley sides.

Designated Landscapes

13.5.7 There are no designated landscapes within Section B.

Visual Receptors and Views

13.5.8 Visual receptors are shown on Figure 13.7: Visual Receptors and Viewpoints (document reference 6.13.F7). The larger settlements / communities are Palgrave, Mellis, Gislingham, Mendlesham, Stowupland, Stowmarket, Needham Market and Bramford as shown on Figure 13.4: Settlements and Infrastructure (document reference 6.13.F4). The A143 and A14 pass through the Study Area, the latter passing through Stowmarket and Needham Market, and there is an extensive network of B-roads and minor roads. There is a network of PRoWs and long-distance routes including the Angles Way, Mid Suffolk Footpath and Gipping Valley River Path. Although a well-wooded landscape, from the elevated plateau there are frequent longer views. Within valleys, views are often contained by the enclosing landform and/or trees and hedgerows. Baseline photographs for representative viewpoints in Section B are shown on Figures 7.12.F23 to 7.12.F71 (document reference 7.12).

Section C – Babergh, Colchester and Tendring

Landscape Character

13.5.9 Section C is located within the South Suffolk and North Essex Clayland NCA (86) and Northern Thames Basin NCA (111), between Bramford in the north and Ardleigh in the south, as shown on Figure 13.5: National Character Areas and East of England Typology (document reference 6.13.F5). The landscape comprises a wide plateau crossed by numerous valleys including the broad valley of the River Stour, as shown on Figure 13.2: Landform and Drainage (document reference 6.13.F2). In terms of the East of England Typology, the northern end of Section C is part of the Wooded Plateau Claylands LCT, crossed by the Valley Settled Farmlands LCT along the course of the Wash Brook. Along the Stour Valley, the floor is part of the Valley Meadowlands LCT, with Valley Settled Farmlands LCT on the upper sides and Plateau Estate Farmlands LCT on the wooded plateau above the valley. To the south, around Ardleigh, the Plateau Estate Farmlands LCT predominates.

Designated Landscapes

13.5.10 The River Stour and its enclosing valley sides and plateau edge form part of the Dedham Vale National Landscape, as shown on Figure 13.1: LVIA Study Area and Landscape Designations (document reference 6.13.F1).

13.5.11 The National Landscape is a lowland river valley landscape, located on the Essex/Suffolk border. It covers the lower reaches of the River Stour and is very low-lying, with the valley floor typically lying at between 0 m and 20 m Above Ordnance Datum (AOD), rising to gentle ridges to the north and south, lying at between 30 m and 60 m AOD.

13.5.12 The ‘special qualities’ of the National Landscape are summarised in the former Countryside Commission’s publication ‘The Dedham Vale Landscape’ (1997) and a later study by Alison Farmer Associates (2016b). The Alison Farmer study summarises the ‘special qualities’ as follows:

- ‘*Iconic lowland river valley associated with the artist John Constable RA, the views he painted are still recognisable today;*
- *Historic villages with timber framed housing and prominent churches;*

- *Valley bottom grazing marshes with associated drainage ditches and wildlife;*
- *Naturally functioning River Stour with associated tributaries, meres and historic river management features;*
- *Semi natural ancient woodlands on valley sides and associated wildlife;*
- *Traditional field boundaries intact and well managed;*
- *Apparent and buried archaeology indicating millennia of human occupation*
- *A sense of relative tranquillity;*
- *Surprisingly long-distance views from higher ground along the valley in an area associated with large skies*' (Page 8)

Visual Receptors and Views

13.5.13 Visual receptors are shown on Figure 13.7: Visual Receptors and Viewpoints (document reference 6.13.F7). The larger settlements / communities are Capel St Mary, Stratford St Mary, Dedham and Ardleigh, as shown on Figure 13.4: Settlements and Infrastructure (document reference 6.13.F4). The A1071, A12, A137 and A120 pass through the Study Area, and there is an extensive network of B-roads and minor roads. There is a network of PRoWs and long-distance routes including the Gipping Valley River Path, Essex Way, St Edmund Way, Stour Valley Path, and National Cycle Network (NCN) Routes 1 and 51. Although a relatively well-wooded landscape, from the sometimes more open and elevated plateaus there are frequent longer views. Within valleys, views are often contained by the enclosing landform and/or trees and hedgerows. Within Dedham Vale National Landscape, views within the Stour Valley tend to be contained by landform and vegetation. Woodland on the plateau edges filters outward views. Baseline photographs for representative viewpoints in Section C are shown on Figures 7.12.F72 to 7.12.F98 (document reference 7.12).

Section D – Colchester

Landscape Character

13.5.14 Section D is located mainly within the Northern Thames Basin NCA (111), with its western extents in the South Suffolk and North Essex Clayland NCA (86). It runs between Ardleigh in the east and Coggeshall in the west, as shown on Figure 13.5: National Character Areas and East of England Typology (document reference 6.13.F5). The landscape comprises a flat to gently undulating plateau, dissected by the broad valley of the River Colne which runs west to east, as shown on Figure 13.2: Landform and Drainage (document reference 6.13.F2). In terms of the East of England Typology, the plateau is part of the Plateau Estate Farmlands LCT and Wooded Plateau Farmlands LCT. The Colne Valley is identified as Valley Meadowlands LCT along the valley floor, rising to Valley Settled Farmlands LCT on the valley sides. The northern and western extents of Colchester are identified as being of urban character.

Designated Landscapes

13.5.15 Section D lies to the south of Dedham Vale National Landscape, as shown on Figure 13.1: LVIA Study Area and Landscape Designations (document reference

6.13.F1), with part of the Landscape and Visual Study Area for this section lying within the National Landscape.

Visual Receptors and Views

13.5.16 Visual receptors are shown on Figure 13.7: Visual Receptors and Viewpoints (document reference 6.13.F7). The larger settlements / communities are Colchester, Great Horkesley, West Bergholt and Marks Tey, as shown on Figure 13.4: Settlements and Infrastructure (document reference 6.13.F4). The A134, A1124, A120 and A12 pass through the Study Area, and there is an extensive network of B-roads and minor roads. There is a network of PRoWs and long-distance routes including the Essex Way, St Edmund Way, Stour Valley Path and NCN Routes 1 and 13. Although a well-wooded landscape, from the elevated plateau there are frequent longer views. Within valleys, views are often contained by the enclosing landform and/or trees and hedgerows. There are some elevated views from within Dedham Vale National Landscape although these are typically focused to the north, across the Stour Valley. Baseline photographs for representative viewpoints in Section D are shown on Figures 7.12.F99 to 7.12.F135 (document reference 7.12).

Section E – Braintree

Landscape Character

13.5.17 Section E is located within the South Suffolk and North Essex Clayland NCA (86), between Coggeshall in the east and Great Leighs in the west, as shown on Figure 13.5: National Character Areas and East of England Typology (document reference 6.13.F5). The landscape is an undulating plateau dissected by numerous river valleys, including of the River Blackwater and River Brain, as shown on Figure 13.2: Landform and Drainage (document reference 6.13.F2). In terms of the East of England Typology, the plateau is part of the Wooded Plateau Farmlands LCT, dissected by the Valley Settled Farmlands LCT along the river valleys. The settlement of Witham is identified as an area of urban character.

Designated Landscapes

13.5.18 There are no designated landscapes within Section E.

Visual Receptors and Views

13.5.19 Visual receptors are shown on Figure 13.7: Visual Receptors and Viewpoints (document reference 6.13.F7). The larger settlements / communities are Coggeshall, Feering, Kelvedon, Silver End, Witham and Black Notley, as shown on Figure 13.4: Settlements and Infrastructure (document reference 6.13.F4). The A12 and A120 pass through the Study Area, and there is an extensive network of B-roads and minor roads. There is a network of PRoWs and long-distance routes including the Essex Way and NCN Routes 16 and 50. Although a well-wooded landscape, from the elevated plateau there are frequent longer views. Within valleys, views are often contained by the enclosing landform and/or trees and hedgerows. Baseline photographs for representative viewpoints in Section E are shown on Figures: 7.12.F136 to 7.12.F156 (document reference 7.12).

Section F – Chelmsford and Brentwood

Landscape Character

13.5.20 Section F is located mainly within the South Suffolk and North Essex Clayland NCA (86), with its southern end in the Northern Thames Basin NCA (111). Section F runs between Great Leighs in the north-east and Ingatestone in the south-west, around the northern and western sides of Chelmsford, as shown on Figure 13.5: National Character Areas and East of England Typology (document reference 6.13.F5). The landscape is an undulating plateau dissected by numerous river valleys, including of the River Ter, River Chelmer, and River Can, as shown on Figure 13.2: Landform and Drainage (document reference 6.13.F2). In terms of the East of England Typology, the plateau is part of the Wooded Plateau Farmlands LCT, dissected by the Valley Settled Farmlands LCT along the river valleys. At the southern end of the route, it passes through the Wooded Hills and Ridges LCT, south-west of Chelmsford. Chelmsford is identified as being of urban character.

Designated Landscapes

13.5.21 There are no designated landscapes within Section F.

Visual Receptors and Views

13.5.22 Visual receptors are shown on Figure 13.7: Visual Receptors and Viewpoints (document reference 6.13.F7). The larger settlements / communities are Great Leighs, Great and Little Waltham, Roxwell, Writtle and Chelmsford, as shown on Figure 13.4: Settlements and Infrastructure (document reference 6.13.F4). There are several A-roads connecting the larger settlements in the Study Area including the A131, A1060, A414 and A12, and there is an extensive network of B-roads and minor roads. There is a network of PRoWs and long-distance routes including the Essex Way, Saffron Trail, Centenary Circle, St Peter's Way and NCN Routes 13 and 50. The landscape is well wooded, as shown on Figure 13.3: Trees and Woodland (document reference 6.13.F3), and views are often contained by woodland and field boundary trees and hedgerows. Within valleys, views are often contained by the enclosing landform and/or trees and hedgerows. Baseline photographs for representative viewpoints in Section F are shown on Figures 7.12.157 to 7.12.182 (document reference 7.12).

Section G – Basildon and Brentwood

Landscape Character

13.5.23 Section G is located within the Northern Thames Basin NCA (111), between Ingatestone in the north and West Horndon in the south, as shown on Figure 13.5: National Character Areas and East of England Typology (document reference 6.13.F5). The landscape comprises a wide plateau divided by river valleys, as shown on Figure 13.2: Landform and Drainage (document reference 6.13.F2). Section G is mostly within the Wooded Hills and Ridges LCT, in terms of the East of England Typology. At the southern end of Section G, a small area is within the Lowland Settled Claylands LCT. There are areas of urban character at Brentwood and Basildon.

Designated Landscapes

13.5.24 There are no designated landscapes within Section G.

Visual Receptors and Views

13.5.25 Visual receptors are shown on Figure 13.7: Visual Receptors and Viewpoints (document reference 6.13.F7). The larger settlements / communities are Ingatestone, Stock, Billericay, Brentwood, and Basildon, shown on Figure 13.4: Settlements and Infrastructure (document reference 6.13.F4). There are several A-roads connecting the larger settlements in the Study Area including the A12, A129 and A127, and there is an extensive network of B-roads and minor roads. There is a network of PRoWs and long-distance routes including NCN Route 13. The landscape is well wooded, as shown on Figure 13.3: Trees and Woodland (document reference 6.13.F3), where views are often contained by woodland and field boundary trees and hedgerows. Within valleys, views are often contained by the enclosing landform and/or trees and hedgerows. Baseline photographs for representative viewpoints in Section G are shown on Figures 7.12.F183 to 7.12.F194 (document reference 7.12).

Section H – Thurrock

Landscape Character

13.5.26 Section H is located mainly within the Northern Thames Basin NCA (111), with its southern end forming part of the Greater Thames Estuary NCA (81). Section H runs between West Horndon in the north and Orsett in the south, as shown on Figure 13.5: National Character Areas and East of England Typology (document reference 6.13.F5). The landscape is characterised by its extensive tracts of flat land, and forms part of a low-lying coastal landscape in its southern extents as shown on Figure 13.2: Landform and Drainage (document reference 6.13.F2). In terms of the East of England Typology, the landscape is part of the Lowland Settled Claylands LCT in the north and Lowland Settled Farmlands LCT in the south. Coastal areas are part of the Coastal Levels LCT which encompasses the north side of the Thames Estuary. There are areas of urban character at Basildon, Chadwell St Mary and Stanford-le-Hope. The Wooded Hills and Ridges LCT extends around the western and southern sides of Basildon.

Designated Landscapes

13.5.27 There are no designated landscapes within Section H.

Visual Receptors and Views

13.5.28 Visual receptors are shown on Figure 13.7: Visual Receptors and Viewpoints (document reference 6.13.F7). The larger settlements / communities are Basildon, Bulphan, Horndon on the Hill, Orsett, Stanford-le-Hope, Chadwell St Mary and East Tilbury, as shown on Figure 13.4: Settlements and Infrastructure (document reference 6.13.F4). There are several A-roads connecting the larger settlements in the Study Area including the A128, A13, A1089 and A1013, and there is an extensive network of B-roads and minor roads. There is a network of PRoWs and long-distance routes including the England Coast Path Route and NCN Link Route 13. There are some long and open views, including south towards the Thames Estuary. Baseline photographs for representative viewpoints in Section H are shown on Figures 7.12.F195 to 7.12.F205 (document reference 7.12).

Future Baseline

13.5.29 The future baseline relates to known or anticipated changes to the current baseline in the future which should be assessed as part of the Project in the ES (Volume 6 of the DCO application).

13.5.30 Ash (*Fraxinus excelsior*) trees within the Study Area may be affected by ash dieback. This is a disease of ash trees caused by a fungus of Asian origin called *Hymenoscyphus fraxineus* (*H. fraxineus*; formerly called *Chalara fraxinea*). The disease causes leaf loss and crown dieback in affected trees. Mapping by the Department for Environment, Food and Rural Affairs and the Forestry Commission confirms the presence of ash dieback in the Study Area. The future baseline therefore assumes that there would be loss of ash trees in the long term across the Study Area, but that other tree species would occupy gaps created in the short term, and overall levels of vegetation would remain like existing.

13.5.31 In contrast, some positive landscape changes are also anticipated. These relate to agri-environment and woodland planting schemes which would continue to enhance the landscape. For example, over the last decade there have been new areas of woodland and hedgerows planted in parts of the Study Area, for example new woodland planting at Fordham Hall Estate. The Waveney and Little Ouse Recovery Project is a landscape recovery scheme, funded by the Department for Environment, Food and Rural Affairs, that aims to enhance the natural heritage of the landscape and combat declines in biodiversity – whilst performing climate enhancing changes. Furthermore, it is anticipated the landscape being managed in accordance with the Dedham Vale AONB and Stour Valley Management Plan (Dedham Vale AONB, 2021) would continue to be enhanced by management practices and conservation and enhancement projects undertaken by the National Landscape and partners.

13.5.32 The future baseline includes consented proposals which are not yet present in the landscape but are expected to be constructed, and therefore are assessed as part of the Project. There are applications for development within the Study Area, which may affect the landscape character or result in changes to visual amenity and people's views. Anticipated and committed developments that have considerable overlap with the Order Limits and therefore the potential to significantly affect the current baseline are detailed below. These, and other committed developments, are identified in Chapter 17: Cumulative Effects (document reference 6.17).

Norwich Main Substation Extension

13.5.33 Norwich Main Substation Extension comprises eastern and western expansions to the existing substation at Norwich Main, as well as a small upgrade of existing equipment just north of the existing substation. The western extension would be approximately five hectares (ha) in size and the eastern extension would be up to one ha in size. Three existing 132 kV pylons to the south of the substation would be removed to enable the extension.

13.5.34 Construction started in 2024 and is expected to be completed in 2027. Norwich Main Substation extension therefore forms part of the future baseline against which the effects of the Project are assessed.

Bramford to Twinstead Reinforcement

13.5.35 Bramford to Twinstead is a network reinforcement between Bramford Substation in Suffolk and Twinstead Tee in Essex and is also part of the Great Grid Upgrade.

The application for development consent was granted in September 2024. The proposals include up to 18 km of overhead line and approximately 11 km of underground cable, the latter through the Dedham Vale National Landscape and in the Stour Valley. The proposals would include overhead line and underground cable entry into Bramford Substation from the south-west.

13.5.36 Bramford to Twinstead forms part of the cumulative effects assessment presented in Chapter 17: Cumulative Effects (document reference 6.17).

Five Estuaries Offshore Wind Farm and North Falls Offshore Wind Farm

13.5.37 Five Estuaries Offshore Wind Farm is the proposed extension to the operational Galloper Offshore Wind Farm. It covers approximately 128 km^2 across two seabed areas and would be located approximately 37 km offshore at its closest point to Suffolk. Five Estuaries would make landfall in Tendring, Essex, before connecting to the Project at the new EACN Substation.

13.5.38 North Falls Offshore Wind Farm is the proposed extension to the operational Greater Gabbard Offshore Wind Farm, located to the west of Galloper Offshore Wind Farm. It covers approximately 95 km^2 and would be approximately 42 km offshore at its closest point. North Falls would make landfall in Tendring, Essex, before connecting to the Project at the new EACN Substation.

13.5.39 If consent is granted, Five Estuaries and North Falls are both proposed to become operational in 2030. The substations for both developments would be in proximity to the new EACN Substation, and therefore are assessed in Chapter 17: Cumulative Effects (document reference 6.17). The design teams for the Project, Five Estuaries and North Falls are liaising closely to ensure compatibility with proposals including proposals for landscape mitigation.

Dunton Hills Garden Village

13.5.40 Dunton Hills Garden Village, which has outline planning permission, covers approximately 225.75 ha of farmland and Dunton Hills Golf Course to the west of Basildon, Essex. Approximately 20.18 ha of Dunton Hills Garden Village intersects with the Order Limits and much of this area forms landscaping within Dunton Hills Garden Village.

13.5.41 The construction period is currently unknown but if detailed planning applications are approved and commenced before Project construction, Dunton Hills Garden Village is assessed in Chapter 17: Cumulative Effects (document reference 6.17). Residents in the Garden Village would be future visual receptors with potential views of the Project.

Lower Thames Crossing (LTC)

13.5.42 LTC is a new road crossing connecting Kent, Thurrock, and Essex, and development consent was granted in March 2025. Approximately 23 km in length, it would connect to the existing road network from the A2/M2 to the M25 with two tunnels (one southbound and one northbound) beneath the River Thames.

13.5.43 LTC is proposed to become operational in 2029/2030. LTC is assessed in Chapter 17: Cumulative Effects (document reference 6.17). Road users on the LTC would become future visual receptors with potential views of the Project. The design teams for the Project and LTC are liaising closely to ensure compatibility with proposals including ecological mitigation, as currently, plans include mitigation within the Order Limits.

Chelmsford North East Bypass

13.5.44 The Chelmsford North East Bypass (CNEB) is a consented 4.6 km single carriageway bypass between Beaulieu Parkway in Chelmsford and a new roundabout on the A131 at Chatham Green. The CNEB intersects with the Order Limits to the east of Chatham Green.

13.5.45 Works to build the first phase of the CNEB are underway and expected to be complete by spring 2026. The construction programme for the remainder of the CNEB, which includes the section which interacts with the Project Order Limits, is unknown. Should the CNEB become operational before Project construction, road users would become future visual receptors with potential views of the Project.

13.5.46 As previously stated, it is recognised that no landscape is static and that the landscape across the Study Area is under different pressures and continually changing, albeit over relatively long timeframes. Further to a review of the above it is considered that there is the potential for changes to landscape character and views in some parts of the Study Area in the future, in the absence of the Project.

13.6 Proposed Mitigation

13.6.1 The approach to mitigation including a description of the mitigation hierarchy is set out in Chapter 5: EIA Approach and Method (document reference 6.5). Three types of mitigation have been incorporated into the Project and assessment: embedded, standard, and additional environmental mitigation.

Embedded Mitigation

13.6.2 Environmental appraisal has been an integral part of the Project design from the outset, which has meant that the Project has been able to avoid environmentally sensitive features, including landscape and visual features, as far as reasonably practicable.

13.6.3 National Grid has also embedded measures into the design of the Project to avoid or reduce significant effects that may otherwise be experienced during construction and operation (and maintenance) of the Project.

13.6.4 Embedded measures are those that are intrinsic to and built into the design of the Project, which are presented in Table 4.2 in Chapter 4: Project Description (document reference 6.4). Embedded measures relevant to Landscape and Visual include:

- Sensitive routeing and siting of the alignment and Order Limits – as far as practicable, effects on identified environmental (including landscape and visual, ecology and heritage assets) and socio-economics receptors have been avoided and reduced
- Undergrounding is proposed in four locations, including through the Dedham Vale National Landscape and part of its setting. The Dedham Vale National Landscape is a nationally important and designated landscape. With the proposed underground cable, the effects on views and setting would be reduced. Further information about undergrounding is provided in the Design Development Report (document reference 5.15) and Consultation Report (document reference 5.1A and B)

- Prior to the commencement of construction works for the Project, several existing overhead and underground third-party services would need to be diverted, removed, undergrounded, or protected. The Project would follow the route of existing 132 kV overhead lines north of Flowton and north of Mellis, where the existing 132 kV overhead lines would be undergrounded. This would help to reduce Landscape and Visual effects
- The Project allows for the use of full line tension gantries at CSE compounds and substations (where design allows). The use of full tension gantries removes the need for a bulkier terminal pylon adjacent to the CSE compound which would reduce visual clutter and therefore help to reduce Landscape and Visual effects
- The Project allows for landscape planting around CSE compounds, the new EACN Substation, south of the new Tilbury North Substation and the existing Norwich Main Substation and its extension. These are shown as 'Environmental Areas' on Figure 4.1: Proposed Project Design (document reference 6.4.F1) and Figure 4.2: Proposed Project Design – Permanent Features (document reference 6.4.F2). Further details including landscape plans and planting schedules are provided in the Outline LEMP (document reference 7.4)
- Replacement planting would be undertaken at the earliest opportunity given the right planting season, to mitigate, where practicable, vegetation removed during construction
- National Grid has considered the proposed materials and colour palette for the CSE compounds and new substation / substation extension including buildings to be sensitive to the environment they are located in, where practicable. Further information is included in the Design Appraisal for Site-Specific Infrastructure (document reference 7.16).

Standard Mitigation

13.6.5 Standard mitigation measures, comprising management activities and techniques, would be implemented during construction of the Project to limit effects through adherence to good site practices and achieving legal compliance.

13.6.6 The Outline CoCP (document reference 7.2) contains relevant standard/good practice measures relating to Landscape and Visual. Note that measures have been assigned references, for example (GG01). For ease of cross-reference, these align with the references provided in Table 6.1 of the Outline CoCP (document reference 7.2). These measures include but are not limited to:

- GG08: Where features are to be retained (including veteran trees, ancient woodland, high, medium and low value trees, hedgerows, watercourses and archaeological/ heritage assets where practicable), an appropriate protective area or protection mechanisms will be established using appropriate equipment or fencing and signage and will be inspected, repaired, and replaced as necessary
- LV01: An Environmental Manager(s)/ Environmental Clerk of Works will be appointed for the duration of the construction phase
- LV02: Pre-construction condition surveys will be undertaken during the construction period to ensure appropriate reinstatement is undertaken. These will identify and record the condition of features such as trees, woodland, hedgerows, walls and fences that are to be reinstated. The surveys will comprise photographic, descriptive, and locational baseline evidence

- LV03: Construction lighting will be directional and minimised where practicable
- LV04: Where practicable, retain elements within the landscape such as trees, hedgerows, walls and fences. Where elements cannot be retained, replacement will be used as appropriate (including re-instating fences, and walls and replanting trees and hedgerows where practicable)
- LV05: The Main Works Contractor(s) will apply the relevant protective principles set out in BS 5837:2012: Trees in relation to design, demolition, and construction (British Standards Institution, 2012). This will be applied to trees within the Order Limits and immediate surrounds which will be preserved through the construction phase and detailed within an Arboricultural Method Statement (AMS). All works to trees, including trees under Tree Preservation Orders and veteran trees, will be undertaken by a suitably qualified and experienced arborist, and supervised by an ArbCoW.

13.6.7 The Outline CoCP (document reference 7.2) is secured by Requirement 4 in the draft DCO (document reference 3.1) which requires the Main Works Contractor(s) to prepare the CoCP to discharge the Requirement.

Additional Mitigation

13.6.8 Additional mitigation comprises measures over and above any embedded and standard mitigation measures, for which this Landscape and Visual assessment has identified a requirement to further reduce significant environmental effects.

13.6.9 No additional mitigation measures, beyond the embedded and standard measures identified above, are required.

13.7 Residual Effects

13.7.1 The likely significant effects of the Project have been assessed using currently available data relating to both the construction and operation (and maintenance) phases of the Project. The residual effects are outlined below. As previously stated, this section assumes that all mitigation – embedded (design measures) and standard practice mitigation measures are in place before assessing the effects. This is in accordance with guidance from IEMA as part of preparing a proportional assessment (IEMA, 2024).

Construction

13.7.2 This section sets out the potential for likely significant residual effects on Landscape and Visual receptors during construction, in relation to both temporary and permanent features. The assessment assumes that the relevant embedded and standard mitigation measures in the Outline CoCP (document reference 7.2) are in place before assessing the effects.

Sources of Effect

13.7.3 The potential sources of Landscape and Visual effects during construction include the following:

- Site clearance, tree felling and hedgerow removal – the loss of landscape elements and features such as woodland, trees, scrub and hedgerows within the Order Limits
- Topsoil stripping, earthworks and excavation, including those associated with temporary construction compounds and site accesses
- Movement of construction-related traffic including delivery and removal of material to and from site, and off-site road traffic including workers travelling to and from site
- Construction and removal of temporary access points (bellmouths) and access routes including temporary bridges and culverts
- General construction activities and facilities including the movement of large scale construction equipment, temporary construction compounds and temporary buildings required for construction, parking on site and materials stockpiles
- Temporary scaffolding
- Temporary hoardings and/or security fencing or signage
- Temporary pylons and overhead line required for construction
- Taller elements including cranes and partially constructed pylons
- Construction lighting particularly during the winter months and potentially at the trenchless crossings if night working was required.

Landscape Effects

13.7.4 **Significant adverse** landscape effects during construction are predicted for all of the LCAs and LCTs which would be directly affected by construction activity within the Order Limits of the Project. These **significant** effects are related to the introduction of construction activity and equipment, including the temporary loss of some landscape features including farmland and field boundary vegetation. **Significant** effects are also anticipated for some LCAs and LCTs outside of the Order Limits, up to a distance of approximately 1.5 km. These **significant** effects are related to the perception of construction activity and the effect this has on identified key characteristics of the landscape. A full summary of effects on LCAs and LCTs during construction is provided in Table A13.2.73 of Appendix 13.2: Landscape Baseline and Assessment (document reference 6.13.A2).

Visual Effects

13.7.5 **Significant adverse** effects during construction are predicted for visual receptors within all of the VRAs that would be directly affected by construction activity within the Order Limits. VRAs are shown on Figure 13.7: Visual Receptors and Viewpoints (document reference 6.13.F7). These **significant** effects are related to the introduction of construction activity into close to medium distance views of residents, recreational receptors and road users. **Significant** effects are expected to extend up to approximately 1.5 km in some instances, for example where there are open, elevated and/or wide views towards construction activity. In some VRAs **significant** effects would be more contained, for example where views of construction activity

are filtered and screened by vegetation or topography. A full summary of effects on visual receptors in VRAs and at viewpoints during construction is provided in Table A13.3.80 of Appendix 13.3: Visual Baseline and Assessment (document reference 6.13.A3).

Effects on Dedham Vale National Landscape

13.7.6 Although the Project would be underground within Dedham Vale National Landscape, construction would have direct effects. The assessment of effects on special qualities within Dedham Vale National Landscape, as set out in Appendix 13.5: National Landscape Assessment Study (document reference 6.13.A5) has established that the following would be subject to **major and significant (adverse)** effects during construction:

- '*Iconic lowland river valley associated with the artist John Constable RA, the views he painted are still recognisable today*'
- '*A sense of relative tranquillity*'.

13.7.7 Two of the special qualities would be subject to **moderate and significant (adverse)** effects during construction:

- '*Valley bottom grazing marshes with associated drainage ditches and wildlife*'
- '*Naturally functioning River Stour with associated tributaries, meres and historic river management features*'.

13.7.8 Five special qualities would be subject to **minor** and **not significant (adverse)** effects during construction:

- '*Historic villages with timber-framed housing and prominent churches*'
- '*Semi-natural ancient woodlands on valley sides with associated wildlife*'
- '*Traditional field boundaries intact and well managed*'
- '*Apparent and buried archaeology indicating millennia of human activity*'
- '*Surprisingly long-distance views from higher ground along the valley in an area associated with large skies*'.

Operation (and maintenance)

13.7.9 This section sets out the likely significant effects of the Project on Landscape and Visual receptors during operation (and maintenance). It assumes that the relevant embedded and standard mitigation measures are in place.

Landscape Effects

13.7.10 At Year 1 of operation, there would be **significant** landscape effects for most of the LCAs and LCTs which would be directly affected by the introduction of an overhead line, CSE compound or substation/substation extension. **Significant** effects would also extend to the surrounding landscape, up to a distance of approximately 1.5 km. There would also be **significant** landscape effects along the route of the sections of underground cable, where reinstated vegetation would still be immature. By Year 15, these effects would reduce due to maturing of the reinstatement planting which would integrate the areas previously used for construction, into the landscape (noting that

trees would not be replanted over the cable route). **Significant** effects relating to the proposed overhead line would remain. A full summary of effects on LCAs and LCTs during operation (and maintenance) is provided in Table A13.2.73 of Appendix 13.2: Landscape Baseline and Assessment (document reference 6.13.A2). A summary of significant effects during operation (and maintenance) is provided below, by Project section and landscape character assessment.

Section A – South Norfolk Landscape Character Assessment (2001)

13.7.11 The following LCAs were predicted to experience **significant** effects during operation (and maintenance):

- LCA D1: Wymondham Settled Plateau Farmland – **moderate and significant (adverse)** within 1.5 km
- LCA E1: Ashwellthorpe Plateau Farmland – **moderate and significant (adverse)** within 1.5 km
- LCA E2: Great Moulton Plateau Farmland – **major and significant (adverse)** within 1.5 km
- LCA B1: Tas Tributary Farmland – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- LCA B4: Waveney Tributary Farmland – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- LCA A5: Waveney Rural River Valley – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km.

Sections B and C – Suffolk Landscape Character Assessment (2010)

13.7.12 The following LCTs were predicted to experience **significant** effects during operation (and maintenance):

- Rolling Valley Farmlands and Furze LCT – **moderate and significant (adverse)** within 1 km
- Wooded Valley Meadowlands Fens LCT – **moderate-major and significant (adverse)** within 0.5 km
- Rolling Valley Claylands LCT – **moderate-major and significant (adverse)** within 0.5 km
- Ancient Plateau Claylands LCT – **moderate and significant (adverse)** within 1.5 km
- Plateau Claylands LCT – **moderate and significant (adverse)** within 1.5 km
- Ancient Estate Claylands LCT – **moderate and significant (adverse)** within 1.5 km
- Valley Meadowlands LCT – **moderate and significant (adverse)** within 0.5 km
- Rolling Valley Farmlands LCT – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km

- Plateau Farmlands LCT – **moderate and significant (adverse)** within 0.5 km.

Section C – Tendring District Landscape Character Assessment (2001)

13.7.13 The following LCAs were predicted to experience **significant** effects during operation (and maintenance):

- LCA 7A: Bromley Heaths – **moderate-major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse**) between 0.5 km and 1.5 km
- LCA 6B: Ardleigh Valley System – **moderate and significant (adverse)** within 0.5 km.

Sections C and D – Colchester Borough Landscape Character Assessment (2005)

13.7.14 The following LCAs were predicted to experience **significant** effects during operation (and maintenance):

- LCA B7: Langham Farmland Plateau – **moderate-major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- LCA A7b: Sub-area A7b Stour River Valley Slopes – **moderate and significant (adverse)** within 0.5 km
- LCA B5: Rochfords Farmland Plateau – **moderate and significant (adverse)** within 1.5 km
- LCA B6: Great Horkesley Farmland Plateau Farmland Plateau – **major-moderate and significant (adverse)** within 0.5 km
- LCA A5: Colne River Valley Slopes – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- LCA A5: Colne River Valley Floors – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- LCA B4: Great Tey Farmland Plateau – **moderate-major and significant (adverse)** within 0.5 km, reducing to moderate and significant (adverse) between 0.5 km and 1.5 km
- LCA B2: Easthorpe Farmland Plateau – **moderate-major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km.

Sections D, E, F and G – Essex Landscape Character Assessment (2003)

13.7.15 The following LCAs were predicted to experience **significant** effects during operation (and maintenance):

- LCA B4: Gosfield Wooded Farmlands – **moderate and significant (adverse)** within 1.5 km

- LCA B1: Central Essex Farmlands – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- LCA C6: Blackwater and Brain Valley – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- LCA C5: Chelmer Valley – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- LCA G2: Chelmsford and Environs – **moderate and significant (adverse)** within 0.5 km
- LCA D2: Brentwood Hills – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km.

Section G – Basildon Borough Landscape Character Assessment (2014)

13.7.16 The following LCAs were predicted to experience **significant** effects during operation (and maintenance):

- LCA 11: West Billericay Wooded Hills and Ridges – **moderate and significant (adverse)** within 1.5 km
- LCA 12: Burstead Sloping Farmland – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- LCA 13: Dunton Settled Claylands – **moderate and significant (adverse)** within 1.5 km.

Section H – Thurrock Landscape Character Assessment (2018)

13.7.17 The following LCAs were predicted to experience **significant** effects during operation (and maintenance):

- LCA J1: Langdon Lower Hill Slopes – **major and significant (adverse)** within 0.5 km
- LCA A1: Bulphan Fenland – **moderate and significant (adverse)** within 0.5 km
- LCA H1: East and West Tilbury Open Undulating Farmland – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- LCA H2: Orsett and Horndon on the Hill Open Undulating Farmland – **moderate and significant (adverse)** within 0.5 km.

Visual Effects

13.7.18 At Year 1 of operation, there would be **significant adverse** visual effects on visual receptors within most of the VRAs which are directly affected by the Project. These significant effects are related to the introduction of the proposed overhead line, CSE compounds, substations or substation extensions into close to medium distance views. By Year 15 of operation (and maintenance), effects on some visual receptors in proximity to CSE compounds, substations and substation extensions would reduce as a result of landscape mitigation within Environmental Areas,

although effects in relation to the proposed overhead line would remain. For visual receptors within VRAs along the proposed underground cable alignment, there would also be significant adverse effects at Year 1 relating to the loss of vegetation. By Year 15 of operation (and maintenance), effects on visual receptors along the proposed underground cable would reduce to **not significant**, as reinstated planting would restore views to be similar to baseline levels (noting that trees would not be replanted over the cable route). A full summary of effects on visual receptors is provided in Section 13.12 of Appendix 13.3: Visual Baseline and Assessment (document reference 6.13.A3). A summary of significant effects during operation (and maintenance) is provided below, by Project section.

Section A – South Norfolk Council

13.7.19 Visual receptors within the following VRAs were predicted to experience **significant** effects during operation (and maintenance):

- VRA A1 Swardeston – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA A2 Stoke Holy Cross – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA A3 Mulbarton and Wreningham – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA A4 Newton Flotman – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA A5 Tacolneston – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA A6 Forncett St Peter – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA A7 Goose Green – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA A8 Tibenham – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA A9 Shelfanger – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA A10 Burston – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA A11 Fen Street – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA A12 Roydon and Diss – **major and significant (adverse)** within 0.5 km, reducing to **minor and not significant (adverse)** between 0.5 km and 1.5 km due to buildings and vegetation which would screen and filter views.

Section B – Mid Suffolk District Council

13.7.20 Visual receptors within the following VRAs were predicted to experience **significant** effects during operation (and maintenance):

- VRA B1 Wortham – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA B2 Palgrave – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA B3 Mellis – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA B4 Finningham and Gislingham – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA B5 Wickham Skeith and Mendlesham – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA B6 Stowupland – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA B7 Forward Green and Creeting St Mary – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA B8 Stowmarket – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA B9 Needham Market – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA B10 Great Bricett – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA B11 Barking and Willisham – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA B12 Elmsett – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA B13 Somersham – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km.

Section C – Babergh District Council, Colchester City Council and Tendring District Council

13.7.21 Visual receptors within the following VRAs were predicted to experience **significant** effects during operation (and maintenance):

- VRA C1 Burstall – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA C2 Washbrook – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km

- VRA C4 Chattisham – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA C5 Capel St Mary – **major and significant (adverse)** within 1.5 km
- VRA C7 Holton St Mary and East Bergholt – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA C10 Dedham Heath – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA C11 Langham – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA C12 Ardleigh – **major and significant (adverse)** within 0.5 km, **reducing to moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA C13 Little Bromley – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km.

Section D – Colchester City Council

13.7.22 Visual receptors within the following VRAs were predicted to experience **significant** effects during operation (and maintenance):

- VRA D1 Tye Green and Boxted – **major and significant (adverse)** within 0.5 km
- VRA D2 Little Horkesley and Wormingford – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA D3 Great Horkesley and Horkesley Heath – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA D5 Fordham – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA D6 West Bergholt, Fordham Heath and Eight Ash Green – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA D7 Fordstreet and Aldham – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA D8 Great Tey – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA D9 Marks Tey – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km.

Section E – Braintree District Council

13.7.23 Visual receptors within the following VRAs were predicted to experience **significant** effects at operation (and maintenance):

- VRA E1 Coggeshall – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km

- VRA E2 Feering and Rivenhall – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA E4 Silver End – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA E5 Black Notley and White Notley – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA E6 Terling and Witham – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km.

Section F – Chelmsford City Council and Brentwood Borough Council

13.7.24 Visual receptors within the following VRAs were predicted to experience significant effects during operation (and maintenance):

- VRA F1 Great Leighs – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA F2 Peverel's Farm – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA F3 Great Waltham – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA F4 Little Waltham – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA F5 Chignall Smealy – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA F6 Chelmsford North-West – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA F7 Roxwell – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA F8 Writtle and Chelmsford West – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA F9 Edney Common – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA F10 Hylands Park – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA F11 Margaretting and Stock – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km.

Section G – Basildon Borough Council and Brentwood Borough Council (and part of Chelmsford City Council)

13.7.25 Visual receptors within the following VRAs were predicted to experience **significant** effects during operation (and operation):

- VRA G1 Ingatestone and Fryerning – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA G2 Billericay West – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA G3 Brentwood East – **moderate and significant (adverse)** within 0.5 km
- VRA G4 Ingrave and Herongate – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA G5 Little Burstead – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA G6 Basildon – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km.

Section H – Thurrock Council

13.7.26 Visual receptors within the following VRAs were predicted to experience **significant** effects during operation (and maintenance):

- VRA H1 Bulphan – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA H2 Horndon on the Hill – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA H3 Orsett – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA H4 Stanford-le-Hope – **moderate and significant (adverse)** within 0.5 km
- VRA H5 Grays and Chadwell St Mary – **moderate and significant (adverse)** within 1.5 km
- VRA H6 Southfields – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km
- VRA H7 Linford – **major and significant (adverse)** within 0.5 km, reducing to **moderate and significant (adverse)** between 0.5 km and 1.5 km.

Effects on Dedham Vale National Landscape

13.7.27 As set out in Appendix 13.5: National Landscape Assessment Study (document reference 6.13.A5), effects on the special qualities of Dedham Vale National Landscape would reduce to **minor and not significant (adverse)** during operation (and maintenance) once the underground cables are covered over and land use and landcover reinstated as far as practicable.

Effects on Residential Visual Amenity

13.7.28 Appendix 13.4: Residential Visual Amenity Assessment (document reference 6.13.A4) describes the change in views likely to be experienced by residents at the closest residential properties to the overground sections of the Project (within approximately 200 m of the centre line). The purpose of the RVAA is to determine whether the overall change to visual amenity would breach the Residential Visual Amenity Threshold at any of these properties, considering whether the Project would be of such a nature that it may permanently affect living conditions or Residential Amenity.

13.7.29 The assessment established that whilst a high magnitude of visual effect is anticipated for 37 of the properties scoped in, no instances have been found where effects on Residential Visual Amenity would be so great that the Residential Visual Amenity Threshold would be breached.

13.8 Monitoring

13.8.1 Habitats reinstated after construction (woodland, trees and hedgerows) would be monitored / managed for a five-year period to ensure their successful establishment and regrowth. Further detail is provided in the Outline LEMP (document reference 7.4).

13.9 Sensitivity Testing

13.9.1 Sensitivity testing has been undertaken as described in Chapter 5: EIA Approach and Method (document reference 6.5) to determine if delays or an extension to the construction programme, changes to the design within the Limits of Deviation (LoD) or if any of the design scenarios presented in Table 4.4 in Chapter 4: Project Description (document reference 6.4) would affect the assessment.

Flexibility in the Construction Programme

13.9.2 The assessment of effects during construction, as summarised in Section 13.7, assumes a four-year, phased construction programme as described in Section 4.7 in Chapter 4: Project Description (document reference 6.4). If the construction programme was delayed there would be no new or different likely significant Landscape and Visual effects to those identified in the assessment, as a change in dates would make no difference to the appearance or duration of the construction works. If construction works were extended, predicted effects would be extended – there would be no materially new or different effects.

Flexibility in Design

Flexibility within the Limits of Deviation

13.9.3 The Landscape and Visual assessment summarised within Section 13.7 is based on the design shown on Figure 4.1: Proposed Project Design (document reference 6.4.F1) and Figure 4.2: Proposed Project Design – Permanent Features (document reference 6.4.F2). As described in Chapter 4: Project Description (document reference 6.4), the Project's design is not fixed and could be subject to change within the defined LoD within the parameters shown on the Works Plans

(document reference 2.3), unless commitments were made otherwise. Table 13.7 lists the elements of flexibility and the assumptions considered in the assessment.

Table 13.7 Flexibility assumptions

Element of Flexibility	Assumption for Initial Assessment	Flexibility Assumptions Assessed
Lateral LoD for proposed overhead line (perpendicular to proposed overhead line)	As depicted on the Works Plans (document reference 2.3).	The assessment has considered the potential effects of locating pylons or conductors anywhere within the lateral LoD, typically up to 50 m either side of the proposed overhead line.
Longitudinal LoD for proposed overhead line (along the proposed overhead alignment)	Unlimited within the Order Limits.	The assessment has considered the potential effects of locating pylons or conductors anywhere along the longitudinal LoD.
Vertical LoD for pylons (and conductors)	As depicted on the Works Plans (document reference 2.3).	The assessment has considered the potential effects of a vertical increase in height of up to 6 m from the pylon design heights presented within the Works Plans (document reference 2.3).
Lateral and longitudinal LoD for proposed new substations and modifications to existing substations	As depicted on the Works Plans (document reference 2.3) and Elevation Drawings (document reference 2.7).	The assessment has considered the potential effects of lateral and longitudinal LoD proposed for new substations.
Vertical LoD for proposed new substations and modifications to existing substations	As depicted on the Elevation Drawings (document reference 2.7).	The assessment has considered the potential effects of an increase of 10% in the heights shown on the Elevation Drawings (document reference 2.7).
Lateral and longitudinal LoD for proposed CSE compounds	As depicted on the Works Plans (document reference 2.3).	The assessment has considered the potential effects of moving CSE compounds up to 50 m in any direction, within the LoD.
Vertical LoD for proposed CSE compounds	As depicted on the Elevation Drawings (document reference 2.7).	The assessment has considered the potential effects of an increase of 10% in the heights shown on the

Element of Flexibility	Assumption for Initial Assessment	Flexibility Assumptions Assessed
		Elevation Drawings (document reference 2.7).
Lateral LoD for proposed underground cables	As depicted on the Works Plans (document reference 2.3).	The assessment has considered the potential effects of moving the proposed underground cable up to 50 m either side of the proposed construction swathe.
Lateral LoD for removal of existing 132 kV overhead lines	The assessment was undertaken based on the parameters depicted on the Works Plans (document reference 2.3).	Not applicable as this has already been taken into account for the initial assessment.
Lateral LoD for removal of existing 33 kV and 11 kV overhead lines	The assessment was undertaken based on the parameters depicted on the Works Plans (document reference 2.3).	Not applicable as this has already been taken into account for the initial assessment.

Effects on Landscape Character

13.9.4 The movement of pylons up to 50 m (laterally) or anywhere along the proposed alignment (longitudinally) could result in changes to landcover including the temporary loss of vegetation during construction. Routeing has sought where practicable to avoid larger areas of vegetation along the alignment, therefore changes to landscape elements would be localised and would affect a small part of the wider LCA or LCT. For LCAs/LCTs which are directly affected by the Project, there would therefore be **no change** in the scale of effect. Indirect effects on the key characteristics of the LCA or LCT would not be affected by localised changes to pylon location.

13.9.5 An increase in the height of pylons by up to 6 m would not result in any changes to landcover or vegetation, as it is assumed that the footprint of the pylon would remain the same or similar. There would therefore be **no change** to the scale of effect on LCAs / LCTs which are within the Order Limits and therefore directly affected. Indirect effects on the key characteristics of the LCA or LCT would not be affected by an increase in pylon height.

13.9.6 Overall, there would be **no change** to the level or significance of effects on landscape character, set out in Appendix 13.2: Landscape Baseline and Assessment (document reference 6.13.A2), as a result of changes to the Project within LoDs.

Effects on Visual Receptors within VRAs

13.9.7 The movement of pylons up to 50 m (laterally) or anywhere along the proposed alignment (longitudinally) could result in the Project moving closer to, or further away from, visual receptors. An increase in height of pylons by up to 6 m could result in an

increase in theoretical visibility across a VRA. In close views (within approximately 0.5 km) the proposed overhead line would be a noticeable feature, and effects are likely to be **significant**. At the scale of the VRA, the movement of pylons within a localised area or an increase in height would not change the scale of effect experienced by visual receptors, which would remain large. In medium and long-distance views the movement of pylons within a localised area and increase in height of pylons would be less perceptible, and there would be **no change** to the scale of effect.

13.9.8 Overall, there would be **no change** to the level or significance of effects on visual receptors, set out in Appendix 13.3: Visual Baseline and Assessment (document reference 6.13.A3), as a result of changes to the Project within LoDs.

Effects on Visual Receptors at Viewpoints

13.9.9 At each viewpoint, consideration was given to flexibility within the LoD and if this would affect the magnitude and significance of effect identified for visual receptors. The following assumptions were made:

- Within the lateral LoD the proposed overhead line could move up to 50 m closer or 50 m further away from the viewpoint
- Within the longitudinal LoD pylons could move in either direction along the overhead line alignment, although the distance between pylons would remain similar to those as set out in Chapter 4: Project Description (document reference 6.4)
- Within the vertical LoD pylons could increase in height by up to 6 m.

13.9.10 Flexibility within the LoD is considered in Table 13.8.

Table 13.8 Effects on visual receptors at viewpoints in relation to flexibility within the LoD

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
1.01	Venta Icenorum Roman Town, near Caistor St Edmund	1.7	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
1.02	PRoW east of Swardeston (Swardeston FP6)	1.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
1.03	PRoW east of Bracon Ash (Bracon Ash FP16)	0.7	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
1.04	Long Lane, Flordon	0.9	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
1.05	Holly Lane, Hapton	0.7	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
1.06	Fundenhall Road, Fundenhall	0.5	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
1.07	PRoW South of Forncett End (Forncett FP28)	0.3	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation.
1.08	Mill Lane, Forncett St Peter	0.5	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
1.09	PRoW west of Tibenham (Tibenham FP4)	0.6	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
1.10	Diss Road, south-west of Tibenham	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
1.11	B1134 Long Row, Gissing Common	2.8	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
1.12	Heywood Road, south of Winfarthing	0.6	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
1.13	Heywood Road, north of Diss	1.3	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
1.14	PRoW south of Bressingham Road (Roydon South Norfolk FP10)	0.3	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would remain **moderate-major and significant (adverse)** during operation (and maintenance).
1.15	A1066 High Road, west of Roydon	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain moderate-major and significant (adverse**) during operation (and maintenance).
1.16	Chandler Road / Boudicca Way, south of Caistor St Edmund	2.2	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
1.17	Grove Lane / Boudicca Way, near Tasburgh Hill Fort	2.8	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
1.18	PRoW north-east of Bunwell (Bunwell FP2)	2.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
1.19	Bressingham Steam Museum	0.6	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
1.20	Bunwell Village Hall	0.9	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
1.21	PRoW near Royden Fen	0.6	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
1.22	Doit Lane, near Roydon	0.3	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain medium during operation (and maintenance). The effect would remain **moderate-major and significant (adverse)** during operation (and maintenance).
2.01	Ling Road, Wortham Ling	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain medium during operation (and maintenance). The effect would **remain moderate-major and significant (adverse**) during operation (and maintenance).
2.03	PRoW Palgrave (Palgrave 5 / 6)	0.8	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
2.04	Burgate Road, Burgate	0.8	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
2.05	Mellis Road, Mellis Green	1.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.06	Mill Street, west of Gislingham	2.1	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
2.07	PRoW south of Gislingham (Gislingham 25)	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain medium during operation (and maintenance). The effect would **remain moderate-major and significant (adverse)** during operation (and maintenance).
2.08	Wickham Street	0.7	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
2.09	PRoW Dandy Corner (Cotton 18)	0.7	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
2.10	Whiteup's Lane, north of Mendlesham Green	1.1	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.11	Middy Railway Footpath near Stonham Road	0.3	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
2.12	Mid Suffolk Footpath / Gipping Road, west of Saxham Street	1.2	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.13	PRoW south of Stowupland (Stowupland 28)	1.5	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.14	Creeting Lane, Creeting St Peter	0.9	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
2.15	PRoW, north-west of Needham Market (Needham Market 5)	0.9	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
2.16	PRoW near Badley Hall Farm (Badley 21)	1.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.17	B1078 Barking Road, Barking Tye	0.8	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
2.18	B1078, Great Bricett	1.7	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.19	PRoW near Castle Farm, Offton (Offton 27)	0.5	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
2.20	Tye Lane, east of Flowton	0.8	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
2.21	Offton Road, north of Elmsett	1.4	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.22	Lion Road near St John's House / Goodrich Park	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
2.23	Road south of Elm Pollard, west of Wickham Skeith	0.0	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
			high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
2.24	PRoW near Mendlesham Hall, west of Mendlesham (Mendlesham 55)	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
2.25	Nettlestead Road, Nettlestead	2.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.26	Ipswich Road, Somersham	0.9	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
2.27	All Saints Road, Creeting Hills	1.5	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.28	Gipping Valley Path near Creeting Hall	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain medium during operation (and maintenance). The effect would **remain moderate-major and significant (adverse)** during operation (and maintenance).
2.31	New Road / PRoW north-east of Thrandeston (Thrandeston 5)	1.9	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.32	PRoW north of Wortham (Wortham 39)	2.5	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.33	Mellis Road, south of Thrandeston	1.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
			intervening vegetation. There would be **no change** to the level or significance of effects.
2.34	Mendlesham Road / Potters Lane, Cotton	0.2	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would remain **major and significant (adverse)** during operation (and maintenance) (and maintenance).
2.35	Mid Suffolk Footpath north of Tan Office	2.5	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.37	PRoW near The Causeway, west of Needham Market (Barking 14)	1.1	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.38	B1078, Ringshall Stocks	0.2	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
2.39	Thornham Road, Thornham Park	1.4	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.40	A1120, Forward Green	1.7	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.41	Mid Suffolk Footpath near Mendlesham Green	0.3	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
			would **remain major and significant (adverse)** during operation (and maintenance).
2.42	PRoW south of Finningham (Finningham 16)	1.2	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.43	PRoW, Middlewood Green (Earl Stonham 8)	0.5	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
2.44	Fen Lane, near Woolney Hall, north of Creeting St Mary	0.8	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
2.45	Church Road, Battisford	0.9	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
2.46	Tye Lane, Flowton	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain moderate and significant (adverse)** during operation (and maintenance).
2.47	Bullen Lane, Bramford	0.5	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
2.48	PRoW south of Flowton (Burstall 7)	0.3	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain moderate-major and significant (adverse**) during operation (and maintenance).
2.49	Burgate Road, south of Little Green	0.3	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
			make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain medium during operation (and maintenance). The effect would **remain moderate-major and significant (adverse)** during operation (and maintenance).
2.50	Wickham Road, south of Wickham Skeith	1.7	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.51	PRoW east of Winnygreen Farm	2.7	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.52	Minor Road near Hintlesham Priory	2.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
2.53	Mid Suffolk Footpath near Mendlesham	2.3	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
3.01	Church Hill, near Burstallhill	0.7	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
3.02	Burstall Lane, Burstall	0.7	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
3.04	Church Lane, Washbrook	0.8	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
3.05	The Street / NCR 1, Chattisham	0.6	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
3.06	PRoW, Hintlesham (Hintlesham 27)	1.6	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
			intervening vegetation. There would be **no change** to the level or significance of effects.
3.07	Pigeon's Lane, Washbrook Street	0.2	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
3.08	NCR 1, Woodlands Road	1.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
3.09	PRoW, Little Wenham (Wenham Parva 14)	1.5	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
3.11	PRoW north of Ardleigh (Ardleigh 2)	0.2	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse**) during operation (and maintenance).
3.12	Waterhouse Lane, Burnt Heath	0.8	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
3.13	PRoW, Little Bromley (Little Bromley 16)	1.9	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
3.14	Lodge Lane, Ardleigh Reservoir	0.7	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
3.15	Birchwood Road west of Lamb Corner	1.7	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
			intervening vegetation. There would be **no change** to the level or significance of effects.
3.17	Great Wenham	2.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
3.19	Essex Way / Mill Hill, west of Lawford	2.4	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
3.20	Fenbridge Lane	4.2	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
3.21	Barn Lane, Little Bromley	1.3	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
3.22	PRoW near Sproughton (Sproughton 20)	0.9	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
3.23	Crown Lane North, near Ardleigh Reservoir	0.8	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
3.24	Higham Hill, south of Lower Raydon	4.2	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
3.25	PRoW near Woodlands Hall (Raydon 5)	0.5	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
3.26	Essex Way, near Langham Hall	3.7	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
3.27	B1066 Park Road, near Thorington Street	4.8	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
3.28	PRoW near Capel St Mary (Copdock 19)	1.9	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
3.29	Hadleigh Road, near Chantry Park	2.4	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
3.30	PRoW south of Greenfields	0.7	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
3.31	Ardleigh Heath	0.5	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
4.01	Boxted Airfield Memorial, Park Lane	1.2	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
4.02	PRoW, Oldhouse Farm, south of Boxted (Boxted 38)	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain moderate-major and significant (adverse**) during operation (and maintenance).
4.03	Broad Lane / Essex Way, east of Great Horkesley	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain medium during operation (and maintenance). The effect would **remain moderate and significant (adverse)** during operation (and maintenance).

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
4.04	PRoW off Holt's Road, east of Wormingford (Little Horkesley 18)	0.8	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
4.05	PRoW near Hillhouse Wood, west of West Bergholt (West Bergholt 5)	0.9	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
4.06	A120 Coggeshall Road, Broad Green	0.5	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
4.07	School Road / Stour Valley Path, west of Little Horkesley	1.7	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
4.08	Fordham	0.5	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
4.09	NCR 13, Fiddlers Hill	0.8	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
4.10	Moor Road, Great Tey	1.6	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
4.11	PRoW south of Aldham (Aldham 15)	0.2	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
4.12	A120 Coggeshall Road, Marks Tey	1.2	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
4.13	B1508 Main Road, Wormingford	1.9	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
4.14	Fordham Road, north-east of Fordham	0.3	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse**) during operation (and maintenance).
4.16	Langham Playing Field off School Road, Langham	1.7	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
4.17	Lodge Lane, Colchester	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
4.18	NCN Route 1 / Langham Lane, north of Colchester	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse**) during operation (and maintenance).
4.19	PRoW at Peppers Lane, east of Great Horkesley (Boxsted 28)	0.2	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
			would **remain major and significant (adverse)** during operation (and maintenance).
4.20	PRoW near Bullbanks Farm, west of Fordham Heath (Aldham 4)	0.6	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
4.21	Brook Road, north of Marks Tey	0.2	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse**) during operation (and maintenance).
4.22	PRoW between Great Tey and Little Tey	1.1	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
4.23	Great Tey Road	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
4.24	Essex Way near Fordstreet	0.5	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
4.25	Essex Way, Mill Road, south of Fordham	0.2	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse**) during operation (and maintenance).
4.26	Essex Way, East Gores	0.2	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
			prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse**) during operation (and maintenance).
4.27	B1508 Colchester Road, near Grove Lodge	0.1	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse**) during operation (and maintenance).
4.28	Essex Way near Poole's Farm	1.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
4.29	PRoW north of Eight Ash Green / Fordham Heath (Eight Ash Green 1)	1.7	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
4.30	Mill Road, south of Fordham	0.2	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
4.31	Rectory Road near Hoe Farm, east of Great Tey	1.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
4.32	Essex Way, west of Teybrook Farm	0.6	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
4.33	North Lane, east of Marks Tey Railway Station	1.1	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
4.34	Crab Tree Lane, north of West Bergholt	0.2	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse**) during operation (and maintenance).
4.35	PRoW, Hemps Green (Fordham 5)	2.2	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
4.36	Green Lane / Essex Way, Horkesley Green	1.6	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
4.37	Hines Close, Aldham	0.3	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint, and a change in the longitudinal LoD could increase the number of pylons visible. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would increase from medium to high during operation (and maintenance). The effect would **increase from moderate and significant (adverse) to moderate-major and significant (adverse)** during operation (and maintenance).
4.38	Essex Way, West Bergholt	1.8	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
5.01	A120 layby, Stockstreet Farm, west of Coggeshall	3.2	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
5.02	Old Road, Feering	1.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
5.03	Rivenhall Place, Silver End	0.2	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse**) during operation (and maintenance).
5.04	White Notley	0.6	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
5.05	Coggeshall Road, Coggeshall Hamlet	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain medium during operation (and maintenance). The effect would **remain moderate-major and significant (adverse**) during operation (and maintenance).
5.06	Cuthedge Lane, west of Coggeshall Hamlet	1.4	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
5.07	NCR 16 and Ranks Green Road, east of Rank's Green	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse**) during operation (and maintenance).
5.08	Fairstead Hall Road, Fairstead	1.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
5.09	Fairstead Lodge Road near Fuller Street	0.3	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
			would **remain major and significant (adverse**) during operation (and maintenance).
5.10	PRoW near Coggeshall Hall	0.0	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
5.11	Cressing Temple Barns, south-west of Silver End	0.8	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
5.12	PRoW, Faulkbourne (Faulkbourne 1)	0.6	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
5.13	Tey Road / Buckley's Lane, between Coggeshall and Great Tey	1.6	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
5.14	Essex Way south of Coggeshall	1.1	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
5.15	Essex Way south-east of White Notley	0.5	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
5.16	Essex Way near Troy's Hall, north-east of Fairstead	0.1	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
5.17	PRoW south of Silver End (Silver End 18)	0.1	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
5.18	PRoW south of Coggeshall Hamlet (Kelvedon 1)	0.1	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
5.19	PRoW north of Gambles Green (Terling 15)	2.2	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
5.20	PRoW, Black Notley (Black Notley 9)	2.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
5.21	Cranes Lane Overbridge, south-west of Kelvedon	1.9	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
6.01	Castle Close, Great Leighs	0.9	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
6.02	Essex Way, west of Fuller Street	0.6	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
6.03	Essex Way, Chatham Green	0.8	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
6.04	PRoW, Broad's Green (Great Waltham 85)	0.3	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
6.05	Centenary Circle, north-west of Chelmsford	0.9	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
6.06	Galleons Hill, Roxwell	1.0	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
6.07	A414 south of Writtle	1.1	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
6.08	Cooksmill Green	1.8	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
6.09	The Causeway, Edney Common	0.8	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
6.10	St Peter's Way, east of Millgreen Common	1.5	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
6.11	St Peter's Way, south of Margaretting Tye	2.1	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
6.12	Pleshey Castle	3.7	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
6.13	B1008, Little Waltham	0.2	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse**) during operation (and maintenance).
6.14	PRoW west of Broomfield (Broomfield 12)	1.3	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
6.15	A414, Widford, near Hylands Park	2.5	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
6.16	Chatham Hall Lane, north of Little Waltham	0.3	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
6.17	Sheepcotes Lane, Little Waltham	1.3	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
6.18	Langleys Park, north of Great Waltham	1.0	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
6.19	Victoria Road, West of Writtle	0.7	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
6.20	PRoW, Chignall St James (Chignall 30)	0.3	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
			high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
6.22	PRoW near Skreens Park (Roxwell 20)	3.1	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
6.23	NCN Route 1 / PRoW near Writtle College (Writtle 19)	1.1	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
6.24	Chignall Smealy	2.1	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
6.25	PRoW, East of Littley Green (Great Waltham 54)	3.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
6.26	Hylands Park, near Hylands House	1.4	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
6.27	Writtle Road, north of Margaretting	0.6	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be no change to the level or significance of effect.
7.01	Ingatestone Road, Buttsbury	0.2	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
7.02	Old Church Lane, Mountnessing Hall	0.7	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
7.03	Church Lane, Hutton	0.7	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
7.04	Tye Common Road, Tye Common	2.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
7.05	PRoW south of Little Burstead (Little Burstead 57)	1.2	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
7.06	Octagon Plantation, Thorndon Country Park	2.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
7.07	PRoW East of Ingrave (Herongate and Ingrave 49)	1.9	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
7.08	Dunton Hills Farm (Dunton Garden Village)	0.8	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
7.09	PRoW near Ingatestone Hall (Ingatestone and Fryerning 39)	1.3	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
7.10	B1007 Stock Road, South of Stock	2.1	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
7.11	Church Road, East of Mountnessing	2.1	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
7.12	Ingatestone Road near White Tyrells	0.2	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
			prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
8.01	Dunton Plotlands Nature Reserve	0.5	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
8.02	Doesgate Lane, Bulphan	0.6	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
8.03	Orsett Road, Horndon on the Hill	0.4	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
8.04	Thurrock Thameside Nature Park	2.5	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
8.05	PRoW east of Chadwell St Mary (No 78)	0.2	A change to the Project within the lateral LoD would potentially bring the existing YYJ and ZB overhead lines closer to the viewpoint. The magnitude of effect would remain high during operation (and maintenance). The effect would **remain major and significant (adverse).**
8.06	PRoW North of Langdon Hills Country Park (No 154)	1.9	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
8.07	Rectory Road, Orsett	1.5	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.

No	Name	Distance from Project (nearest structure)	Effects on Visual Receptors in relation to Flexibility within the LoD
8.08	Footpath off Butts Lane, Stanford Le Hope	0.9	A change to the Project within the LoD would be perceptible but there would be **no change** to the magnitude of effect. There would be **no change** to the level or significance of effect.
8.09	One Tree Hill, Langdon Hills Country Park	4.0	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
8.10	PRoW, Orsett Fen (No 90)	2.7	A change to the Project within the LoD would not be perceptible due to distance and / or filtering of views by intervening vegetation. There would be **no change** to the level or significance of effects.
8.11	PRoW near Southfields (No 42)	0.3	A change to the Project within the lateral LoD would potentially bring the proposed overhead line closer to the viewpoint. An increase in the vertical LoD would make the nearest pylons to the viewpoint slightly more prominent. The magnitude of change would remain high during operation (and maintenance). The effect would **remain major and significant (adverse)** during operation (and maintenance).
8.12	Hoford Road, east of Chadwell St Mary	0.2	A change to the Project within the lateral LoD would potentially bring the existing YYJ and ZB overhead lines closer to the viewpoint. There would be an increase in the magnitude of effect during operation (and maintenance), from medium to high. The effect would **increase from moderate and significant (adverse) to moderate-major significant (adverse)**.

Effects on Dedham Vale National Landscape

13.9.11 The movement of pylons up to 50 m (laterally) or anywhere along the proposed alignment (longitudinally) could result in the Project moving closer to, or further awayfrom Dedham Vale National Landscape. An increase in height of pylons by up to 6 m could result in an increase in theoretical visibility from the National Landscape. Due to the distance of the overhead line from the National Landscape the slight movement of pylons or increase in height within the LoD would not change the effects on special qualities.

13.9.12 The movement of the underground cables within the LoD would potentially result in changes to the amount of trees and hedgerow affected during construction; however, the difference would be small and therefore would not result in a change to the assessment of effects on special qualities.

Flexibility within the Order Limits

13.9.13 There are 19 locations where alternative designs were identified within Chapter 4: Project Description (document reference 6.4). The effects of these design scenarios on Landscape and Visual receptors, in comparison with the effects of the Project as it is currently envisaged, are set out below.

Norwich Main Substation (Section A)

13.9.14 The design scenario allows for the overhead line alignment to be accommodated further east, should planning consent not be granted for a battery storage facility to the south of Norwich Main Substation.

13.9.15 The assessed alignment and the design scenario are both located within the Tas Tributary Farmland LCA. Both routes would cross arable fields and require the removal of some field boundary vegetation including some trees. Vegetation would be reinstated after construction, with the exception of trees under the overhead line. Both options would result in similar effects on landscape features and key characteristics, and therefore, there would be no change to the significance of effects on landscape character.

13.9.16 The design scenario would not bring the alignment within close proximity of any residential properties. Both the assessed alignment and the design scenario would pass over a PRoW, resulting in localised effects on recreational users of the PRoW. The design scenario would be located to the east of woodland at Sprow's Pits, which would help to filter and screen views of part of the overhead line from visual receptors to the west (e.g. at Gowthorpe Manor). However, other parts of the Project are likely to be visible, and therefore there would be **no change** to the significance of effects on visual receptors in VRAs A1 or A2.

Anglian Water Sewage Works South of Tabernacle Lane (Section A)

13.9.17 The use of an alternative haul road to the north of RG40 to RG42 would bring construction traffic slightly closer to residents at the southern side of Forncett End, and in proximity to several PRoWs south of the settlement. Effects would be localised and short term during construction. There would be **no change** to the significance of effects on landscape or visual receptors.

Silica Sands Mineral Site East of the Proposed New EACN Substation (Section C)

13.9.18 The design scenario allows for the overhead line alignment and underground cable alignment between TB1 and TB8 to be swapped (i.e. part of the overhead line would move to the north of Little Bromley Road and part of the underground cable would move to the south).

13.9.19 The assessed alignment and the design scenario are both located in the Bromley Heaths LCA. Both options would result in the loss of some landscape features including field boundary trees and hedgerows. Vegetation would be reinstated after construction, with the exception of trees under the overhead line. Both options would result in similar effects on landscape features and key characteristics, and therefore there would be **no change** to the significance of effects on landscape character.

13.9.20 The design scenario would bring the overhead line closer to some visual receptors to the north, but further from some visual receptors to the south, including users of a PRoW which runs between Ardleigh and Badley Hall. For both options there would

be close and relatively open views towards the overhead line for local community receptors including residents, recreational receptors and road users on Little Bromley Road. Overall, there would be **no change** to the significance of effects on visual receptors in VRAs C10, C12 and C13.

Flying Trade Group and Crown Quarry East and West of the A12 (Sections C and D)

13.9.21 The design scenario allows for an alternative alignment of the overhead line within the Order Limits, between TB18 and TB22, to accommodate a number of planning applications adjacent to the A12.

13.9.22 The assessed alignment and the design scenario are both located in the Bromley Heaths LCA and would result in the loss of some landscape features. Vegetation would be reinstated after construction, with the exception of trees under the overhead line. Depending on the alignment for the design scenario it is possible that effects on trees along Wick Lane would be reduced. Both options would result in similar effects on landscape features and key characteristics, and therefore there would be **no change** to the significance of effects on landscape character.

13.9.23 The design scenario would bring the overhead line closer to some visual receptors, but further from others. For both options there would be close views towards the overhead line for local community receptors including residents and people travelling on the A12. Overall, there would be **no change** to the significance of effects on visual receptors in VRAs C11 or C12.

Mineral Extraction Site North-West of Kelvedon (Section E)

13.9.24 The design scenario allows for an alternative alignment of the overhead line within the Order Limits, between TB84 and TB87, to reduce effects on a potential mineral extraction site should it be identified as an allocation in a future mineral plan.

13.9.25 The assessed alignment and the design scenario are both located in the Blackwater and Brain Valley LCA and would cross large-scale arable fields, and result in the loss of some field boundary hedgerows. Vegetation would be reinstated after construction, with the exception of trees under the overhead line. Both options would result in similar effects on landscape features and key characteristics, and therefore there would be **no change** to the significance of effects on landscape character.

13.9.26 The design scenario would bring the overhead line slightly closer to visual receptors at Felix Hall, and both options would cross or be close to a PRoW which runs between Pantling's Lane and Rook Hall. For both options there would be close views towards the overhead line for local community receptors including residents, users of the PRoW network and local roads. Overall, there would be **no change** to the significance of effects on visual receptors in VRAs E1 or E2.

Lions Hall Minerals Site East of the A131 and to the West of Lyonshall Wood Ancient Woodland (Section F)

13.9.27 The design scenario allows for an alternative alignment of the overhead line within the Order Limits, between TB128 and TB133, to reduce effects on the Lions Hall Minerals Site should it be progressed.

13.9.28 The assessed alignment and the design scenario are both located in the Central Essex Farmland LCA and would cross large-scale arable fields, and result in the loss of some field boundary hedgerows and hedgerow trees. Vegetation would be

reinstated after construction, with the exception of trees under the overhead line. Both options would result in similar effects on landscape features and key characteristics, and therefore there would be **no change** to the significance of effects on landscape character.

13.9.29 The design scenario would bring the overhead line slightly closer to some residential receptors, including at Long's Farm. The overhead line would be slightly further from other visual receptors, including at Chatham Green. Both options would cross the PRoW network between Chatham Green and Lyonshall Wood. For both options there would be close views towards the overhead line for local community receptors including residents and users of the PRoW network and local roads. Overall, there would be **no change** to the significance of effects on visual receptors in VRAs F1 and F2.

Chelmsford Bypass East of the A131 and to the West of Lyonshall Wood Ancient Woodland (Section F)

13.9.30 The use of an alternative haul road off the proposed Chelmsford Bypass new roundabout, should the Chelmsford Bypass progress, would move construction traffic closer to some visual receptors but further from others. Effects would be localised and short term during construction. There would be **no change** to the significance of effects on landscape or visual receptors.

Crest Nicholson Housing Development South of the A127 (Section G)

13.9.31 The use of an alternative haul road to the south of TB225 and TB226 would bring construction traffic slightly closer to residents along Lower Dunton Road. Effects would be localised and short term during construction. There would be **no change** to the significance of effects on landscape or visual receptors.

BPA Pipeline Crossing West of Langdon Hills Golf and Country Club (Section H)

13.9.32 The design scenario allows for an alternative alignment to the east between TB238 and TB240 to facilitate a more perpendicular crossing at the BPA pipeline, should this be required.

13.9.33 The assessed alignment and the design scenario are both located in the Langdon Lower Hill Slopes LCA and would cross large-scale arable fields. Both options would result in similar effects on landscape features and key characteristics, and therefore there would be **no change** to the significance of effects on landscape character.

13.9.34 The design scenario would bring the overhead line slightly closer to Langdon Hills Golf Club. Both options would cross a PRoW between the Golf Club and Brentwood Road. The design scenario is likely to require additional angle pylons although these would not be in proximity to sensitive residential receptors. For both options there would be close views towards the overhead line for local community receptors including users of the PRoW network. Overall, there would be **no change** to the significance of effects on visual receptors in VRAs H1 and H2.

Southfields Development South of the A1013 (Section H)

13.9.35 The design scenario allows for an alternative alignment to the west of TB255 and TB259, to allow flexibility if the Southfields housing development does not go ahead. This would remove two crossings of Buckingham Hill Road, a crossing of a historic landfill site and pylons situated within parkland and a quarry site.

13.9.36 The assessed alignment and the design scenario are both located in the East and West Tilbury Open Undulating Farmland LCA and would cross farmland and scrubland. Both options would result in similar effects on landscape features and key characteristics, and therefore there would be **no change** to the significance of effects on landscape character.

13.9.37 The design scenario would bring the overhead line onto slightly higher ground closer to the eastern edge of Southfields (houses along Sandown Road). Woodland along the eastern side of Southfields would filter/screen views of both options. Both options would cross a PRoW which runs east of Orsett Golf Club. The design scenario may require fewer angle pylons. For both options there would be close views towards the overhead line for local community receptors including residents and users of the PRoW network. Overall, there would be **no change** to the significance of effects on visual receptors in VRAs H6 and H7.

Lower Thames Crossing (LTC)[3] South of the Proposed New Tilbury North Substation (Section H)

13.9.38 The design scenario allows for alternative alignments of the existing YYJ and ZB overhead lines within widened Order Limits, and an amended Environmental Area, should the LTC project not be constructed or ongoing coordination identifies a change is required.

13.9.39 The assessed alignment and the design scenario are both located in the East and West Tilbury Open Undulating Farmland LCA. Should the existing YYJ and ZB overhead lines be routed to the south, it is likely that some roadside vegetation along the A1089 and woodland east of Heath Road would need to be removed. Vegetation would be reinstated after construction, with the exception of trees under the overhead line. There would be a slight increase in the magnitude of effect within a localised area to the north of Orsett Heath, although **no change** to the level of effect which would remain **significant**.

13.9.40 The amended Environmental Area encompasses proposed areas of native woodland, scrub, hedgerows, trees and grassland. This would strengthen the key characteristics of the landscape and help to integrate the Project into the landscape in the longer term.

13.9.41 The design scenario would move the existing overhead lines to the south, further from some properties to the north, but closer to Orsett Heath to the south. It is likely that additional angle pylons would be required, which would have a localised adverse effect due to their bulkier appearance. For a group of properties along Heath Road, the existing overhead lines would move from the north of the properties, to the south, and are likely to be at a similar distance. Overall, some community receptors would experience a slight increase in visual effects, and some would experience a slight decrease in visual effects. For both options there would be close views towards the overhead lines for local community receptors, and there would be **no change** to the overall significance of effects on visual receptors in VRAs H5 and H6.

[3] The LTC project is shown on Figure 17.1: Long List of 'Other Developments' Considered within the Cumulative Impacts Assessment (document reference 6.17.F1).

River Stour Crossing West of Stratford St Mary (Section C)

13.9.42 The design scenario provides for a single underground crossing at either the northern or southern crossings of the River Stour, within Dedham Vale National Landscape. Both crossings were assessed as part of the Project.

13.9.43 The northern crossing and southern part of the southern crossing are in the Stour River Valley Floor LCA. The northern part of the southern crossing is within the Valley Meadowlands LCT. A single crossing would reduce the temporary loss of vegetation including grazing marsh along the River Stour and field boundary hedgerows, both of which contribute to the identified special qualities of the National Landscape. There would be a slight decrease in **significant** effects on landscape features and key characteristics within a localised area along the valley floor.

13.9.44 A single crossing would reduce **significant** effects on visual receptors during the construction period within a localised area of the National Landscape. This would include local residents and recreational receptors, including users of the St Edmund Way and Stour Valley Path long distance walking routes. Effects on visual receptors within VRAs C8 and C9 would be reduced within a localised area but would remain **significant** for some visual receptors during construction.

Black Brook North of Langham (Section C)

13.9.45 The design scenario allows for flexibility of routeing the underground cable within widened Order Limits to the west of the A12 and south of Black Brook, in the vicinity of existing UK Power Networks underground cables. The widened Order Limits are within an area which forms part of the setting of Dedham Vale National Landscape.

13.9.46 The assessed alignment and the design scenario are both located in the Langham Farmland Plateau LCA. Both options cross farmland and field boundary vegetation. Both options would result in similar effects on landscape features and key characteristics, and therefore there would be **no change** to the significance of effects on landscape character.

13.9.47 The design scenario would bring construction activity slightly closer to properties along Grove Hill to the west. For both options there would be close views towards the construction of the underground cable for local community receptors including residents along Grove Hill. Effects would be temporary and short term. Overall, there would be **no change** to the significance of effects on visual receptors in VRAs C10 and C11.

Tilbury North Access at the Proposed New Tilbury North Substation (Section H)

13.9.48 The design scenario allows for temporary access to Tilbury North Substation via Brentwood Road and permanent access running east to west between Brook Farm and Orsett Golf Club.

13.9.49 The use of an alternative temporary access would bring construction traffic closer to some visual receptors (e.g. at Brentwood Road) but further from others. Effects would be localised and short term during construction. There would be **no change** to the significance of effects on landscape or visual receptors.

13.9.50 The use of an alternative permanent access would bring maintenance traffic closer to some visual receptors but further from others. Effects would be localised and access would be infrequent. There would be **no change** to the significance of effects on landscape or visual receptors.

Thurrock Airfield and Low Heights West of Langdon Hills Golf and Country Club (Section H)

13.9.51 The Thurrock Airfield design scenario would increase the height of pylons between TB238 and TB243 to the standard lattice pylon height instead of low height pylons, should Thurrock Airfield no longer be in use.

13.9.52 TB238 to TB243 is within the Langdon Lower Hill Slopes LCA and crosses large-scale arable fields enclosed by hedgerows. A change to standard lattice pylons would not affect the underlying scale of the landscape or landcover. Both options would result in similar effects on landscape features and key characteristics, and therefore there would be **no change** to the significance of effects on landscape character.

13.9.53 The design scenario would increase the height of the pylons, resulting in a slight increase in theoretical visibility of the Project within a localised area. For both options there would be close views towards the overhead line for local community receptors including users of the PRoW network and residents along Brentwood Road to the west. Overall, there would be **no change** to the significance of effects on visual receptors in VRAs H1 and H2.

Temporary Construction Compounds (Section H)

13.9.54 The relocation of a temporary construction compound to the immediate west of Lower Dunton Road, east of TB233 would bring it closer to some visual receptors (local residents and visitors to Dunton Plotlands). Effects would be localised and short term during construction. There would be **no change** to the significance of effects on landscape or visual receptors.

South of the new Tilbury North Substation (Section H)

13.9.55 The design scenario allows for a widened LoD around the underground cable, existing and proposed new locations of YYJ and ZB pylons and the two CSE compounds to allow for potential design refinements due to uncertainties regarding other projects (including Lower Thames Crossing, housing developments and aggregate facilities).

13.9.56 The assessed alignment and the widened LoD are both located in the East and West Tilbury Open Undulating Farmland LCA. Both options cross farmland and field boundary vegetation. Both options would result in similar effects on landscape features and key characteristics, and therefore there would be **no change** to the significance of effects on landscape character.

13.9.57 The widened LoD has the potential to bring the Project closer to, or further away from, some visual receptors within VRAs H5, H6 and H7. For both options there would be close views towards the Project. There is the potential for an increase in the magnitude of effect on visual receptors in VRAs H5, H6 and H7, depending on the location of new infrastructure. There would be **no change** to the level of effect which would remain **significant** for the closest receptors.

The Walthams and Standard Heights to the south of the River Chelmer (Section F)

13.9.58 The design scenario allows for standard height pylons south of the River Chelmer between TB140 and TB142, instead of low height pylons. The design scenario also allows for the removal of one pylon and slight changes to the locations of the remaining two pylons.

13.9.59 The assessed alignment and design scenario are both located in the Chelmer Valley LCA. A change to standard lattice pylons would not affect the underlying scale of the landscape or landcover. Both options would result in similar effects on landscape features and key characteristics, and therefore there would be **no change** to the significance of effects on landscape character.

13.9.60 The design scenario would increase the height of two pylons, resulting in a slight increase in theoretical visibility of the Project within a localised area. One pylon would be removed, resulting in a slight decrease in the number of pylons visible within a localised area. For both options there would be close views towards the overhead line for local community receptors including users of the PRoW network and residents along Chelmsford Road. Overall, there would be **no change** to the significance of effects on visual receptors in VRAs F3 and F4.

Abbreviations

Abbreviation	Full Reference
AONB	Area of Outstanding Natural Beauty (now 'National Landscape')
BS	British Standard
CBA	Chris Blandford Associates
CNEB	Chelmsford North East Bypass
CoCP	Code of Construction Practice
CSE	Cable Sealing End (compound)
CWS	County Wildlife Sites
DESNZ	Department for Energy Security and Net Zero
DTM	Data Terrain Modelling
EACN	East Anglia Connection Node
EIA	Environmental Impact Assessment
ES	Environmental Statement
GIS	Geographical Information System
GLVIA3	Guidelines for Landscape and Visual Impact Assessment, Third edition (Landscape Institute and IEMA, 2013)
ha	Hectares
IEMA	Institute of Environmental Management and Assessment
km	Kilometre
kV	Kilovolt
LEMP	Landscape and Ecological Management Plan
LCA	Landscape Character Assessment
LCT	Landscape Character Type
LoD	Limits of Deviation
LUC	Land Use Consultants
LVIA	Landscape and Visual Impact Assessment
m	Metre
NCA	National Character Area
NCN	National Cycle Network
NPS	National Policy Statement

Abbreviation	Full Reference
OS	Ordnance Survey
Para	Paragraph
PEIR	Preliminary Environmental Information Report
PRoW	Public Right of Way
RMSE	Root-mean-square-error
TGN	Technical Guidance Note
TIN	Technical Information Note
VRA	Visual Receptor Area
ZTV	Zone of Theoretical Visibility

Glossary

Term	Description
GLVIA3	The Landscape Institute and Institute of Environmental Management and Assessment's Guidelines for Landscape and Visual Impact Assessment, Third Edition, Published by Routledge.
Great Grid Upgrade	The Great Grid Upgrade comprises 17 major infrastructure projects that will both scale up the grid and update National Grid's existing networks.
Landscape character	A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse (taken from An Approach to Landscape Character Assessment (Natural England, 2014b)).
Landscape Character Areas	These are the discrete geographical areas of a particular landscape type. Each has its own individual character and identity, even though it shares the same generic characteristics with other types (Natural England, 2014b).
Landscape Character Assessment	This is the process of identifying and describing variation in the character of the landscape. It seeks to identify and explain the unique combination of elements and features (characteristics) that make landscapes distinctive. This process results in the production of a Landscape Character Assessment (Natural England, 2014b).
Landscape Character Types	These are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation, historical land use, and settlement pattern (Natural England, 2014b).
Landscape compensation	Landscape compensation refers to measures that seek to compensate 'landscape and visual' residual impacts as far as practicable. Compensation forms part of the 'mitigation hierarchy', as referred to in NPS EN-1 (DESNZ, 2024). Examples include creating or enhancing natural landscape features outside of the Order Limits and can be secured through a planning obligation. Draft EN-1 (DESNZ, 2025) confirms that compensation, by definition, does not reduce an adverse effect resulting from a development.
Landscape effects	Effects on the landscape as a resource in its own right (GLVIA3 (Landscape Institute and IEMA, 2013)).
Landscape value	The relative value or importance attached to different landscapes by society on account of their landscape qualities (taken from Technical Guidance Note 02/21 Assessing landscape value outside national designations, (Landscape Institute, 2021)).
Main Works Contractor	Company or individual responsible for the overall construction of a project.

Term	Description
Magnitude (of effect)	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration (taken from GLVIA3 (Landscape Institute and IEMA, 2013)).
National Planning Policy Framework	The National Planning Policy Framework is a key part of the government's reforms to make the planning system less complex and more accessible. It vastly simplifies the number of policy pages about planning. The planning practice guidance to support the framework is published online and regularly updated.
Natural beauty	The term 'natural beauty' is enshrined in the National Parks and Access to the Countryside Act 1949 (it was also subsequently included in the Nature Conservation and Amenity Lands Order (NI) 1985), the Town and Country Planning (Scotland) Act 1997, and the Planning etc. (Scotland) Act 2006). Natural beauty is not exhaustively defined in the legislation, but its meaning has been clarified and interpreted through a series of studies, guidance documents and public inquiries (Landscape Institute, 2021).
Order Limits	The maximum extent of land within which the authorised development may take place.
Overhead line	Conductor (wire) carrying electric current, strung from pylon to pylon.
Pylons	Structures that support the overhead line (conductors). There are two types of pylons; suspension (line), where the conductors are simply suspended from the pylon, and tension (angle).
Residual effects	The consequence of an 'impact' of construction, operation and decommissioning of the Proposed Development after mitigation measures have been applied.
Scoping	Scoping is the process of determining the content and extent of matters that should be covered in the Environmental Impact Assessment.
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor (taken from GLVIA3 (Landscape Institute and IEMA, 2013)).
Significance (in EIA)	A measure of the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic (Landscape Institute and IEMA, 2013).
Special qualities	A statutory expression used in (amongst other places) sections 5 and 11A of the National Parks and Access to the Countryside Act 1949 (as amended) and section 87 of the Countryside and Rights of Way Act 2000. Paragraph 87 of the Countryside and Rights of Way Act 2000 requires a conservation board to have regard to the purpose of increasing the understanding and enjoyment by the public of the special qualities of the area of outstanding natural beauty.
Visual amenity	The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of

Term	Description
	activities of the people living, working, recreating, visiting or travelling through an area. [taken from GLVIA3 (Landscape Institute and IEMA, 2013)]
Visual effects	Effects on specific views and on the general visual amenity experienced by people (Landscape Institute and IEMA, 2013).
Visual Receptor Area	Geographic area used to group visual receptors for the purposes of the visual assessment. Boundaries were identified based on geographical location, shared landscape characteristics and a similarity in the nature of views.
Visual receptors	Individuals and/or defined groups of people who have the potential to be affected by a proposal (Landscape Institute and IEMA, 2013).
Visualisation	A computer simulation, photomontage or other technique illustrating the predicted appearance of a development (Landscape Institute and IEMA, 2013).
Zone of Theoretical Visibility (ZTV)	A map, usually digitally produced, showing areas of land within which a development is theoretically visible (Landscape Institute and IEMA, 2013).
Wirescape	This is the term used when there is currently, or would be as a result of new development, a concentration of overhead electricity lines in a landscape or in views. Wirescape is referred to in the Holford Rules and in paragraph 2.9.17 of National Policy Statement for Electricity Networks Infrastructure (EN-5).

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