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A	29 August 2025	DCO Application
B	30 January 2026	Providing supplementary environmental information in response to advice provided under section 51 of the Planning Act 2008 by the Planning Inspectorate.
C	7 July 2026	Providing supplementary environmental information as committed in response to ExQ1 HE 1.43 in 8.9.1 Applicant's Responses to First Written Questions [REP3-074] .

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11. Historic Environment

11.1 Introduction

- 11.1.1 This chapter of the Environmental Statement (ES) (Volume 6 of the Development Consent Order (DCO) application) details the assessment of the residual effects of Norwich to Tilbury the 'Project') on the Historic Environment. This chapter covers effects on the following:
- Direct physical effects on archaeology during construction (including from movement of contaminants or pollutants and permanent changes to groundwater flows as a result of underground cabling)
 - Setting and indirect effects on archaeology during construction and operation (and maintenance)
 - Setting and indirect effects on built heritage during construction and operation (and maintenance)
 - Indirect physical effects on built heritage as a result of vibration or subsidence caused by changes to groundwater during construction and operation (and maintenance)
 - Direct physical effects on designated historic landscapes (comprising registered parks and gardens) and non-designated historic landscapes during construction
 - Setting effects on designated historic landscapes (comprising registered parks and gardens) during construction and operation (and maintenance).
- 11.1.2 There are interrelationships related to the likely significant effects on the Historic Environment and other environmental topics. Therefore, please also refer to the following chapters:
- Chapter 7: Air Quality (document reference 6.7)
 - Chapter 9: Geology, Hydrogeology and Contaminated Land (document reference 6.9)
 - Chapter 12: Hydrology, Land Drainage and Flood Risk (document reference 6.12)
 - Chapter 13: Landscape and Visual (document reference 6.13)
 - Chapter 14: Noise and Vibration (document reference 6.14)
 - Chapter 16: Traffic and Transport (document reference 6.16).
- 11.1.3 This chapter is supported by the following figures and appendices:
- Figure 11.1: Historic Environment Study Area (document reference 6.11.F1)
 - Figure 11.2: Designated Heritage Assets Assessed in the ES Chapter (Rev B) (document reference 6.11.F2)¹

¹ Rev B of Figure 11.2 includes updates identified as errata.

- Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter, (Rev D) (document reference 6.11.F3)
- Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4)
- Figure 11.5: Historic Environment and LVIA Viewpoint Locations (document reference 6.11.F5)
- Figure 11.6: Phase 2 Geophysical Survey Preliminary Results (document reference 6.11.F6) (NB: this figure is superseded by Appendix 11.8: Geophysical Survey (Phase 2) Report (document reference 6.11.A8))
- Appendix 11.1: Historic Environment Baseline Report (document reference 6.11.A1)
- Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2)
- Appendix 11.3: East Anglia Connection Node (EACN) Substation Geophysical Survey Report (document reference 6.11.A3)
- Appendix 11.4: Geophysical Survey (Priority Area) Results Report (Rev B) (document reference 6.11.A4)
- Appendix 11.5: Trial Trenching Results Report (Rev B) (document reference 6.11.A5)
- Appendix 11.6: Geoarchaeological and Archaeological Monitoring of Ground Investigation Works Report (document reference 6.11.A6)
- Appendix 11.7: Assessment of Harm to Designated Heritage Assets (document reference 6.11.A7)

11.1.4 Appendix 11.8: Geophysical Survey (Phase 2) Report (document reference 6.11.A8). This chapter has also been drafted in parallel with the following DCO document:

- Visualisations (document reference 7.12).

11.2 Regulatory and Planning Policy Context

National Policy Statement (NPS)

- 11.2.1 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), 2024a) 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 EN-5) (DESNZ, 2024b).
- 11.2.2 Full consideration of the relevant NPSs for the Project can be found in the Policy Compliance Document (document reference 5.7).

Overarching NPS for Energy (EN-1)

- 11.2.3 NPS EN-1 (DESNZ, 2024a) contains the following paragraphs relating to the Historic Environment which have been considered within this chapter.
- 11.2.4 Paragraph 5.9.11 states *‘Where a site on which development is proposed includes, or the available evidence suggests it has the potential to include, heritage assets with an archaeological interest, the applicant should carry out appropriate desk-based assessment and, where such desk-based research is insufficient to properly assess the interest, a field evaluation. Where proposed development will affect the setting of a heritage asset, accurate representative visualisations may be necessary to explain the impact’*.
- 11.2.5 Paragraph 5.9.24 states *‘In considering the impact of a proposed development on any heritage assets, the Secretary of State should consider the particular nature of the significance of the heritage assets and the value that they hold for this and future generations. This understanding should be used to avoid or minimise conflict between their conservation and any aspect of the proposal’*.
- 11.2.6 Paragraph 5.9.30 states *‘Substantial harm to or loss of significance of assets of the highest significance, including Scheduled Monuments; [...] Registered Battlefields; grade I and II* Listed Buildings; grade I and II* Registered Parks and Gardens; and World Heritage Sites, should be wholly exceptional’*.
- 11.2.7 Paragraph 5.9.32 and 5.9.33 state *‘Where the proposed development will lead to less than substantial harm to the significance of the designated heritage asset, this harm should be weighed against the public benefits of the proposal, including, where appropriate securing its optimum viable use’ and ‘In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset’*. The impact assessment presented in this chapter and Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2) presents the impact using the Environmental Impact Assessment (EIA) terminology as agreed in the EIA Scoping Opinion (document reference 6.20). In order to ensure accordance with the NPS (EN-1) assessment of harm to designated assets is presented in Appendix 11.7: Assessment of Harm to Designated Heritage Assets (document reference 6.11.A7).
- 11.2.8 The need for new nationally significant energy infrastructure projects is set out in Part 3 of EN-1 (DESNZ 2024a). Paragraph 3.2.6 states, *‘The Secretary of State should assess all applications for development consent for the types of infrastructure covered by this NPS on the basis that the Government has demonstrated that there is a need for those types of infrastructure which is urgent, as described for each of them in this Part.’* Paragraph 3.2.7 goes on to state that *‘In addition, the Secretary of State has determined that substantial weight should be given to this need when considering applications for development consent under the Planning Act 2008’*.
- 11.2.9 Paragraph 3.3.63 states that: *‘Subject to any legal requirements, the urgent need for CNP Infrastructure to achieving our energy objectives, together with the national security, economic, commercial, and net zero benefits, will in general outweigh any other residual impacts not capable of being addressed by application of the mitigation hierarchy. Government strongly supports the delivery of CNP Infrastructure and it should be progressed as quickly as possible.’*

- 11.2.10 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'*.
- 11.2.11 As set out in Paragraph 4.2.16, 'the Secretary of State will take as the starting point for decision making that such [CNP] infrastructure is to be treated as if it has met any tests which are set out within the NPSs, or any other planning policy, which requires a clear outweighing of harm, exceptionality or very special circumstances.' This means that the Secretary of State will take as a starting point that CNP Infrastructure will meet the following, non-exhaustive, list of tests (as set out in paragraph 4.2.17):
- *'Where development within a Green Belt requires very special circumstances to justify development;*
 - *Where development within or outside a Site of Special Scientific Interest (SSSI) requires the benefits (including need) of the development in the location proposed to clearly outweigh both the likely impact on features of the site that make it a SSSI, and any broader impacts on the national network of SSSIs;*
 - *Where development in nationally designated landscapes requires exceptional circumstances to be demonstrated; and*
 - *Where substantial harm to or loss of significance to heritage assets should be exceptional or wholly exceptional'.*

NPS for Electricity Networks Infrastructure (EN-5)

- 11.2.12 NPS EN-5 (DESNZ, 2024b) provides limited guidance in relation to heritage. The references to Cultural Heritage or the Historic Environment are firstly in Paragraph 2.9.19 in summary of the Horlock Rules, which states *'... applicants should: ... seek to avoid altogether internationally and nationally designated areas of the highest amenity, cultural or scientific value by the overall planning of the system connections'*. This is defined in footnote 21 as *'Internationally and nationally designated areas of highest amenity, cultural or scientific value are: National Parks; Areas of Outstanding Natural Beauty; Heritage Coasts; World Heritage Sites; Ramsar Sites; Sites of Special Scientific Interest; National Nature Reserves; Special Protection Areas; Special Areas of Conservation. Care should be taken in relation to all historic sites with statutory protection e.g. Ancient Monuments, Battlefields and Listed Buildings'*.
- 11.2.13 Secondly, in relation to underground options, paragraph 2.9.25 states *'the Secretary of State should only grant development consent for underground or subsea sections of a proposed line over an overhead alternative if they are satisfied that the benefits accruing from the former proposal clearly outweigh any extra economic, social, or environmental impacts that it presents, and that any technical obstacles associated with it are surmountable. In this context it should consider: [...] designated heritage assets and Heritage Coasts (including, where relevant, impacts on the setting of designated features and areas) [...] the potentially very disruptive effects of undergrounding on local communities, habitats, archaeological and heritage sites'*.
- 11.2.14 The Infrastructure Planning (Decisions) Regulations 2010, Regulation 3 (listed buildings, conservation areas and scheduled monuments) requires that:
- '(1) When deciding an application which affects a listed building or its setting, the decision-maker must have regard to the desirability of preserving the listed building*

or its setting or any features of special architectural or historic interest which it possesses.

(2) When deciding an application relating to a conservation area, the decision-maker must have regard to the desirability of preserving or enhancing the character or appearance of that area.

(3) When deciding an application for development consent which affects or is likely to affect a scheduled monument or its setting, the decision-maker must have regard to the desirability of preserving the scheduled monument or its setting’.

Other National Legislation and Policy

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

- Ancient Monuments and Archaeological Areas Act 1979
- Planning (Listed Buildings and Conservation Areas) Act 1990
- Levelling-up and Regeneration Act 2023
- National Planning Policy Framework, (Ministry of Housing, Communities and Local Government, 2024)
- Planning Practice Guidance: Historic Environment, (Ministry of Housing, Communities and Local Government, Department for Levelling Up, Housing and Communities, 2019).

Regional and Local Policy

11.2.16 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.

11.2.17 Local Planning Authorities within the Order Limits comprise South Norfolk, Mid Suffolk, Babergh, Colchester, Tendring, Braintree, Chelmsford, Brentwood, Basildon, and Thurrock). There are a further five Local Planning Authorities within the 2 km Historic Environment Study Area (Breckland, Ipswich, Maldon, Medway, and Gravesham) and a further three Local Planning Authorities within the 3 km Historic Environment Study Area (Epping Forest, Uttlesford and Norwich).

11.2.18 Key regional and local policy relevant to the Historic Environment, that has informed the assessment within this ES, comprise:

- 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)
- Breckland Local Plan (Breckland Council, adopted 2023)
- Babergh and Mid Suffolk Joint Local Plan – Part 1 (Babergh and Mid Suffolk District Councils, adopted 2023)
- Ipswich Local Plan 2018-2036 (Ipswich Borough Council, adopted 2022)

- North Essex Authorities' Shared Strategic Section 1 Plan (adopted 2021) (Tendring, Colchester and Braintree)
- Colchester Borough Local Plan (Colchester Borough Council, adopted 2022)
- Tendring District Local Plan 2013-2033 Section 2 (adopted 2022)
- Braintree District Local Plan 2013 – 2033 (Braintree District Council, adopted 2022)
- Uttlesford Local Plan (Uttlesford District Council, adopted 2005)
- Chelmsford Local Plan (Chelmsford City Council, adopted 2020)
- Maldon Local Development Plan 2014-2029 (Maldon District Council, adopted 2017)
- Epping Forest Local Plan 2011 – 2033 (Epping Forest District Council, adopted 2023)
- Brentwood Local Plan 2016 – 2033 (Brentwood Borough Council, adopted 2022)
- Basildon District Local Plan Saved Policies (Basildon District Council, adopted 2007): defers to national planning policy for archaeology and the historic environment
- Thurrock Local Development Framework (Thurrock Council, adopted 2015)
- Gravesham Local Plan (Gravesham Borough Council, adopted 2014)
- Medway Local Plan (Medway Council, adopted 2003).

Guidance

11.2.19 Relevant guidance, specific to the Historic Environment, that has informed this ES (Volume 6 of the DCO application), comprises:

- Standard and guidance for Historic Environment desk-based assessment (Chartered Institute for Archaeologists ((CIfA), 2014, updated 2020)
- Design Manual for Roads and Bridges (DMRB) LA 106 Cultural Heritage Assessment (National Highways, 2020a)
- Conservation Principles Policies and Guidance for the Sustainable Management of the Historic Environment (Historic England, 2008)
- Managing Significance in Decision-Taking in the Historic Environment. Historic Environment Good Practice Advice in Planning: 2 (Historic England, 2015)
- The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3 (Second Edition) (Historic England, 2017)
- Statements of Heritage Significance: Analysing Significance in Heritage Assets. Historic England Advice Note 12 (Historic England, 2019)
- Guidance on Heritage Impact Assessments for Cultural World Heritage Properties (International Council on Monuments and Sites (ICOMOS), 2011)
- Guidance and Toolkit for Impact Assessment in a World Heritage Context United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2022)

- Principles of Cultural Heritage Impact Assessment in the UK (Institute of Environmental Management and Assessment (IEMA), Chartered Institute for Archaeologists, ClfA, Institute of Historic Building Conservation, 2021).

11.3 Scope of the Assessment

- 11.3.1 The scope of the assessment has been informed by the 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 Historic Environment assessment is provided in Appendix 5.2: Scope of the Assessment (document reference 6.5.A2).
- 11.3.2 In addition, the EIA Scoping Opinion, together with a response from National Grid against each point raised by the Planning Inspectorate relevant to the Historic Environment, is provided in Appendix 5.1: National Grid's response to the EIA Scoping Opinion (document reference 6.5.A1).

Project Engagement and Consultation

- 11.3.3 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 and subsequent consultations in 2025 are provided in Appendix K and Appendix M of the Consultation Report (document reference 5.1).
- 11.3.4 A summary of discussions and how these have influenced the Project, scope and the approach to the assessment are provided in Table 11.1.

Table 11.1 Engagement undertaken relevant to the Historic Environment

Reference	Comment	National Grid Response
Norfolk Historic Environment Record (HER), May 2022, July 2023 and November 2024	Norfolk HER provided HER data for the Scoping Report Corridor ³ , plus a 500 m buffer (a 500 m buffer was created to allow for future design development).	Information obtained to inform the baseline within Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1)
Suffolk HER, May 2022, July 2023, March 2024 and December 2024	Suffolk HER provided HER data for the Scoping Report Corridor, plus a 500 m buffer (a 500 m buffer was created to allow for future design development).	Information obtained to inform the baseline within Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1).
Essex HER, May, June 2022, August 2023,	Essex HER provided HER data and aerial imagery for the Scoping	Information obtained to inform the baseline within Appendix

³ The preferred corridor in the Corridor Preliminary Routeing and Substation Siting Study (National Grid, 2022), was consulted on at non-statutory consultation in 2022 and referred to within the EIA Scoping Report (document reference 6.19) as the 'Scoping Report Corridor'.

Reference	Comment	National Grid Response
March 2024 and November 2024	Report Corridor, plus a 500 m buffer (a 500 m buffer was created to allow for future design development).	11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1).
Colchester HER, June 2022, September 2023 and December 2024	Colchester HER provided HER data for the Scoping Report Corridor, plus a 500 m buffer (a 500 m buffer was created to allow for future design development).	Information obtained to inform the baseline within Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1).
Babergh District Council, Mid Suffolk District Council, Thurrock Council, Norfolk County Council, Suffolk County Council, Essex County Council, Braintree District Council, Chelmsford City Council, Basildon Borough, Colchester City Council, Historic England, July 2022	The Project presented the proposed approach to scoping and methodology for the Historic Environment assessment and baseline. Most aspects of the approach were agreed but the outstanding areas are the Study Area and specific aspects of the proposed approach to scoping, the walkover survey and historic building assessment.	Further consideration was given to the specific aspects not agreed and further engagement was undertaken in September 2022 to present the updated approach (see item below).
Norfolk County Council, Suffolk County Council, Essex County Council, Braintree District Council, Chelmsford City Council, Colchester City Council, Historic England, September 2022	The Project presented the updated approach to Study Areas, scoping of the walkover and scoping of historic buildings, in response to feedback received at, and following the previous meeting in July 2022 (above). This was largely agreed with some caveats regarding the 250 m Study Area in specific geographic locations along the major river valleys crossed by the Project and some concerns regarding designated assets of the highest significance beyond the 3 km Study Area; this would be dealt with on a case-by-case basis once the Zone of Theoretical Visibility (ZTV) is available. A brief update regarding archaeological fieldwork was provided. The Landscape and Visual Impact Assessment (LVIA) methodology, including viewpoints, was presented.	The EIA Scoping Report (document reference 6.19) reflected the updated information presented in the meeting; this was agreed with the Planning Inspectorate except for certain aspects of the scoping of historic buildings. Further information is presented in Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) regarding the justification for scoping out of individual historic buildings. The Historic Environment Baseline Report has been updated to take account of the ZTV for the design presented in the DCO application.
Norfolk County Council, South Norfolk Council, Suffolk County Council, Babergh District Council,	The proposed methodology and location for landscape and heritage viewpoints was presented to stakeholders. The primary focus was	A methodology for the selection of heritage viewpoints was issued to stakeholders in June 2023,

Reference	Comment	National Grid Response
Mid Suffolk District Council, Essex County Council, Colchester City Council, Braintree District Council, Chelmsford City Council, Brentwood Borough Council, Basildon Borough Council, Thurrock Council, February 2023	landscape viewpoints, with some landscape viewpoints identified as also relevant for heritage. Heritage stakeholders requested a methodology for selection of heritage viewpoints and heritage specific viewpoints.	with comments received and addressed in subsequent meetings. Heritage specific viewpoints were issued to stakeholders for a consultation in November 2023. Heritage specific viewpoints are included in Visualisations (document reference 7.12).
Historic England, March 2023	Meeting held to discuss the proposed methodology and location for landscape and heritage viewpoints. Some landscape viewpoints were also identified as relevant for heritage. Historic England raised an issue of non-designated heritage assets that may be of equivalent value with designated heritage assets and would need to be appropriately considered in the assessment including the selection of viewpoints. Historic England also raised several heritage assets for consideration of viewpoints.	A methodology was issued in June 2023 and heritage specific viewpoints were issued to stakeholders for a consultation in November 2023. Desk-based research and walkover and setting survey informed assessment of the value of heritage assets, and engagement with Historic England has since been undertaken to agree whether any non-designated heritage assets may be of equivalent value with designated heritage assets.
Norfolk County Council, South Norfolk Council, Suffolk County Council, Babergh District Council, Mid Suffolk District Council, Essex County Council, Tendring District Council, Colchester City Council, Braintree District Council, Chelmsford City Council, Thurrock Council, Historic England September 2023	This Historic Environment Thematic Group meeting was held to update stakeholders on progress with the Baseline Report in Appendix 11.1 in the Preliminary Environmental Report (PEIR), approach to fieldwork (including geophysical survey, ground investigation (GI) works and trial trenching) and heritage viewpoints.	Actions regarding providing updated information to stakeholders on proposed GI works have been completed and further engagement on these topics held since this date, as described below.
Historic England, September, and October 2023	Informal meetings were held to discuss the proposed approach to assessment of specific high value designated heritage assets.	The feedback received has informed the assessment in the ES (Volume 6 of the DCO application).
Norfolk County Council, Suffolk County Council, Essex County Council, Thurrock Council, Colchester City Council,	A meeting was held with archaeological advisors to discuss the approach to pre-consent evaluation fieldwork comprising geophysical survey and trial trenching. This included agreement of the approach to an	The approach to WSIs for pre-consent evaluation is as agreed in the meeting. Results of fieldwork have informed the baseline and assessment in the ES

Reference	Comment	National Grid Response
Historic England November 2023	Overarching Written Scheme of Investigation (WSI), to produce one document for the Project for geophysical survey and one overarching document for trial trenching to cover all methodology with site-specific WSIs subsequently produced, to provide specific detail of trench layout and methodology. This approach was agreed with stakeholders.	(Volume 6 of the DCO application) and are detailed in Appendix 11.4: Geophysical Survey (Priority Areas) Results Report (Rev B) (document reference 6.11.A4) and Appendix 11.5: Trial Trenching Results Report (Rev B) (document reference 6.11.A5).
Norfolk County Council, South Norfolk Council, Suffolk County Council, Babergh District Council, Mid Suffolk District Council, Essex County Council, Colchester City Council, Tendring District Council, Braintree District Council, Chelmsford City Council, Brentwood Borough Council, Basildon Borough Council, Historic England, November 2023	The meeting was held to discuss heritage specific viewpoints. The methodology for selection of viewpoints was briefly outlined (as stakeholders had already seen and commented) and the heritage specific viewpoints were presented. Feedback was received from stakeholders regarding proposed viewpoints and additional viewpoints were proposed for some heritage assets. Some viewpoints were agreed to be scoped out but written explanation for this was requested. The importance of the ZTV was emphasised by stakeholders and a commitment to share as soon as possible was made. The ZTVs were shared with the PEIR.	An agreed list of heritage viewpoints are shown on Figure 11.5: Historic Environment and LVIA Viewpoint Locations (document reference 6.11.F5). Heritage specific photomontages and LVIA visualisations are included in Visualisations (document reference 7.12).
Norfolk County Council, Suffolk County Council, Essex County Council, Historic England, March 2024	This meeting discussed the WSI and included comments on the various buffer distances, a request of the shapefile for the WSI area, a confirmation of the intention of future geophysical survey, peat deposits in the Waveney Valley were commented on as were cropmarks in the Stour Valley. The greyscale results of the recent geophysical surveys were shared. The programme for the archaeological trial trenching for the WSI was shared.	Actions from meeting were completed.
Norfolk County Council, Suffolk County Council, Essex County Council, Historic England, April 2024.	Meeting for the Archaeology Working Group. The meeting discussed if further comments on geophysics WSIs were needed, approaches to trial trenching, the	Actions from meeting were completed.

Reference	Comment	National Grid Response
	programme of current trial trenching, the appropriate turnaround times and content for site-specific trial trenching WSIs, and the trial trenching of the haul roads. The archaeological monitoring of GI works was also discussed in terms of the issuing of GI locations to be shared a week ahead of the WSIs and their turnaround times. Attendance and visits to the GI locations were also discussed, as were the specifics of the monitoring (boreholes and test pits). The information regarding trial trenching, WSIs, GI locations and the Project programme was requested to be shared ahead of the WSIs and/or May.	
Norfolk County Council, Suffolk County Council, Historic England, May 2025	This was a meeting for the Archaeology Working Group. The geophysical surveys and results were discussed, and a request was made for the greyscale imagery to be made available. The use of drones had been trialled during the geophysical surveys, and it was noted that this should be an addition to and not a replacement of the standard techniques. A trial trenching sample of 4% was proposed and a discussion was had to drop to 2% at points which ultimately was not taken forward. Access through the use of powers under the Housing and Planning Act 2016 for trial trenching was discussed. The programme was outlined and work through 2024 was discussed and the aim of the priority areas being finished by October 2025 was noted. Priority areas were suggested on how best to split the Archaeological Trial Trenching (ATT) areas based on sites and site-specific WSIs. Cumulative impact areas around Ardleigh should be made a priority. Confirmation by the	Actions from meeting were completed.

Reference	Comment	National Grid Response
	Project on the scope of the GI monitoring and boreholes TBC.	
Norfolk County Council, Suffolk County Council, Historic England, Essex Council, June 2024.	The meeting was for the Archaeology Working Group, and it discussed the progress of the GI monitoring, geophysical surveys, and trenching WSIs, programme, and the sign-off of trial trenches by archaeological advisors to the Local Planning Authorities. A discussion on the length of trial trenches decided that 30 m would be used as standard as this would give better coverage and fewer gaps between trenches. The timescales for the sign-off of trenches, weekly monitoring visits and potential remote sign-off of blank trenches was discussed.	Actions from meeting were completed.
Essex County Council, Thurrock County Council, Brentwood Borough Council, Essex Place Services, Norfolk County Council, Suffolk County Council, Basildon Borough Council, South Norfolk Council, Colchester City Council, Tendring District Council, Braintree District Council), September 2024	The purpose of this meeting was to seek agreement on the Landscape and Visual Impact Assessment (LVIA) Methodology based on the comments received from the Planning Inspectorate in their EIA Scoping Opinion (December 2022) including the number and location of viewpoints and visualisations.	The focus of the meeting was LVIA. Historic Environment attended to provide additional information on LVIA viewpoints that also informed the heritage assessment.
Essex County Council, Suffolk County Council, Norfolk County Council, October 2024	This meeting was to update the stakeholders on the progress of the geophysical survey, archaeological trial trenching, OWSI, and programme updates. The geophysical update noted that there was still survey work to complete and that the next steps were being prepared for areas including the haul road, underground sections, and pylon working areas. The OWSI progress was discussed and the comments from the stakeholders had been added, apart from Historic	Actions from meeting were completed.

Reference	Comment	National Grid Response
	England's which, with this addition, would complete the OWSI. There was a discussion on the discovery of a medieval moated site in Suffolk, and it was requested that more information should be shared. It was confirmed that the design change had already considered this asset, and pylons had been moved to avoid physical impacts. It was confirmed that the full extents of the Order Limits wouldn't be surveyed due to focus on likely areas of construction impact and program constraints. Shapefiles of the geophysical survey results would be shared. There was an update on the archaeological trial trenching which included a discussion on the progress of the excavation and a comment was made on the delays due to land access, and that there had been a varying amount of archaeology found. The update regarding the OWSI discussed various formatting comments and whether the document should be split by county or kept as a whole, there were concerns about the contents of the document and its specifics. The AMS-OWSI would be shared at the end of the year (2024). Next steps were discussed, and this included the issuing of the geophysics and GI monitoring and recording WSI.	
Historic England, November 2024	Meeting to discuss Project development and assessment, information gathering, and to confirm the understanding of scheduled monuments with 'old county number' records within the corridor and to share this information. The meeting discussed non-designated assets with equivalent value with designated assets, and the approach to assessment of value of designated	The feedback received has informed the assessment in the ES.

Reference	Comment	National Grid Response
	assets like listed buildings and registered parks and gardens.	
Braintree District Council, Essex Place Services, Tendring District Council, Colchester City Council, November 2024	Meeting to discuss the Project responses to stakeholder feedback from statutory consultation. Viewpoints were discussed, and it was noted that an extra 50 viewpoints were added since statutory consultation. Heritage viewpoints were confirmed as included in the ZTV figures and any changes that would occur post-consultation would be communicated.	An agreed list of heritage viewpoints are shown on Figure 11.5: Historic Environment and LVIA Viewpoint Locations (document reference 6.11.F5). Heritage specific photomontages and LVIA visualisations are included in Visualisations (document reference 7.12).
Suffolk County Council, Babergh and Mid Suffolk Council	Meeting to discuss the Project responses to stakeholder feedback from statutory consultation. The impact of the design decision on the Waveney Valley in Suffolk was queried and discussed. A discussion on the viewpoints was had and it was confirmed that viewpoints could be reviewed following the confirmation of the design changes that would impact the locations of the viewpoints.	An agreed list of heritage viewpoints are shown on Figure 11.5: Historic Environment and LVIA Viewpoint Locations (document reference 6.11.F5). Heritage specific photomontages and LVIA visualisations are included in Visualisations (document reference 7.12).
Essex County Council, Norfolk County Council, Suffolk County Council, Thurrock Borough Council, December 2024	The meeting provided updates on the progress of archaeological trial trenching, geophysical surveys, and related activities. The Historic Environment Assessment would form part of the ES chapter, with drafts of the Outline AMS-OWSI and Baseline Report, including updates since the PEIR document, expected to be shared in 2025. In Norfolk, further excavations were expected to take place in March/April 2025, on the basis that undergrounding proposals in the Waveney Valley would move forward. Ground investigations in the Tilbury area were ongoing, with geoarchaeological monitoring taking place, though no near-surface archaeological monitoring was occurring due to low potential. Separate monitoring efforts by	Actions from meeting were completed.

Reference	Comment	National Grid Response
	archaeologists and geoarchaeologists were confirmed. Finally, data from round one of geophysical surveys was being processed and would be shared soon to inform the scope of round two.	
Suffolk County Council, Norfolk County Council, Braintree District Council, Essex Place Services, Thurrock Borough Council, January 2025	The Archaeological Working Group meeting provided updates on ongoing archaeological work, targeted consultations, and specific areas such as the Waveney Valley and Tilbury Substation. Discussions included the proposed removal of undergrounding in Thurrock. The decision-making process for the Waveney Valley was addressed, with confirmation that geophysical surveys had been conducted, impacts reduced by removing one pylon, and trenching prioritization highlighted alongside GI report updates. Peaty soils were identified during GI works, and pylons were positioned to avoid significant known archaeology. Updates on trial trenching outlined progress on excavated trenches, WSI updates, and future plans for trenching. The geophysical survey progress was discussed. There were no additional updates on GI progress. The meeting focused on fieldwork updates, mitigation efforts, and targeted archaeological investigations.	Actions from meeting were completed.
Historic England, February 2025	This meeting was to summarise the changes following the design changes and the impacts for the baseline report, viewpoints, and the Statement for Common Ground. It was clarified that documents were being finalised, and the viewpoints information would be shared in the format of figures and shapefiles. There was a discussion about the actions from the previous meeting and the progress of these actions.	The feedback received has informed the assessment in the ES (Volume 6 of the DCO application).

Reference	Comment	National Grid Response
Suffolk County Council, Norfolk County Council, Braintree District Council, Thurrock Borough Council, February 2025	The Archaeological Working Group meeting provided updates on ongoing archaeological work, including trial trenching and geophysics. Comments were requested on the OWSI, with questions raised about clarifications on underground cable types. Excavations were scheduled to restart later in the month, with priority sites identified for excavation. The geophysics update highlighted plans to return to the site later in the month to continue survey, the impact of design changes and land access issues on surveys, and the next priority areas. The GI update addressed monitoring at Bramford, noted issues encountered, and confirmed that required pits had been monitored.	Actions from meeting were completed.
Historic England, February 2025	A series of meeting were held to provide a summary of the proposed or existing historic environment viewpoints across the Project and to provide justification and discussion on the decisions made with the aim to seek agreement on their locations between Historic England and National Grid. The viewpoints were discussed individually, and comments were made about those which required further investigation. It was noted that all historic environment viewpoints would have a visualisation to inform assessment.	An agreed list of heritage viewpoints are shown on Figure 11.5: Historic Environment and LVIA Viewpoint Locations (document reference 6.11.F5). Heritage specific photomontages and LVIA visualisations are included in Visualisations (document reference 7.12).
Essex County Council, Chelmsford City Council, Thurrock Borough Council, February 2025	The meeting was to discuss the Historic Environment viewpoints that are located in Essex that will inform the assessment and the statement of common ground. There was a discussion about the proposed viewpoints and clarification on some viewpoints for which there were questions. The deadline for additional viewpoints comments was discussed.	An agreed list of heritage viewpoints are shown on Figure 11.5: Historic Environment and LVIA Viewpoint Locations (document reference 6.11.F5). Heritage specific photomontages and LVIA visualisations are included in Visualisations (document reference 7.12).

Reference	Comment	National Grid Response
Essex County Council, Tendring District Council, Colchester City Council, February 2025	This meeting was to discuss the most recent proposed design changes through targeted consultation, and historic environment viewpoints. There was a discussion on the inclusion of baseline photos and/or photomontages with the heritage viewpoints, and it was confirmed that non-designated assets have not been considered for viewpoints.	An agreed list of heritage viewpoints are shown on Figure 11.5: Historic Environment and LVIA Viewpoint Locations (document reference 6.11.F5). Heritage specific photomontages and LVIA visualisations are included in Visualisations (document reference 7.12).
Suffolk County Council, Babergh and Mid Suffolk District Council, February 2025	This meeting was to discuss the heritage viewpoints that are located through Suffolk that will inform the assessment and statement of common ground. There was a discussion on various viewpoints in relation to different designated assets. There was a query about non-designated heritage assets near the alignment which were in discussion with Historic England. The deadline for additional comments was discussed.	An agreed list of heritage viewpoints are shown on Figure 11.5: Historic Environment and LVIA Viewpoint Locations (document reference 6.11.F5). Heritage specific photomontages and LVIA visualisations are included in Visualisations (document reference 7.12).
South Norfolk and Broadlands District Council, February 2025	This meeting was to discuss the proposed historic environment viewpoints, clarify specific queries, and provide information on the process. There was a discussion on curtilage and setting for farm buildings. The deadline for additional comments was discussed.	An agreed list of heritage viewpoints are shown on Figure 11.5: Historic Environment and LVIA Viewpoint Locations (document reference 6.11.F5). Heritage specific photomontages and LVIA visualisations are included in Visualisations (document reference 7.12).
Essex County Council, Brentwood Borough Council, Historic England, Suffolk County Council, Tendring District Council, Colchester City Council, Norfolk County Council, Chelmsford City Council, February 2025	This meeting was to discuss the Draft Historic Environment Baseline Report and the associated annexes. There was a discussion on the figures for this report, the consultation responses, and there was confirmation on the upcoming report deadlines and the priority areas that will be shown on the figures. The statutory consultation responses were discussed and included comments on the 250 m buffer and the scoping out table.	The feedback received has informed the assessment in the ES (Volume 6 of the DCO application).

Reference	Comment	National Grid Response
	Other comments regarding the aerial imagery methodology, value assessments of assets, and the language used in the impact assessment were addressed.	
Suffolk County Council, Norfolk County Council, Braintree District Council, Essex Place Services, Thurrock Borough Council, Historic England, March 2025	The Archaeological Working Group meeting focused on updates regarding the ongoing archaeological fieldwork. The group discussed the current status of the GI works, including archaeological monitoring and the availability of various reports. The geophysical survey update shared greyscale results, highlighted improved access to previously restricted areas, and outlined plans for the upcoming months. For trial trenching, it was noted that several areas were either completed or scheduled for completion in the next month, with details on the number of ongoing trenches and future plans. A query about the potential removal of a war memorial in Little Bromley was addressed, confirming that no listed buildings would be removed or altered. Another question concerned geophysical results from Suffolk, which confirmed the effectiveness of the methods used, as good crop marks and anomalies were identified in the Stour area. Feedback from another development suggested that reprocessing and alternative techniques could enhance results.	Actions from meeting were completed.
Suffolk County Council, Norfolk County Council, Braintree District Council, Essex Place Services, Thurrock Borough Council, Historic England, April 2025	This meeting was to discuss the progress of the geophysical surveys, trial trenching and archaeological mitigation strategy, and Outline AMS-OWSI (document reference 7.5). Results of the geophysical survey were provided and included updates to the progress near Tilbury. There was an update on the progress of the trial trenching and the status of sites were provided including those completed, ongoing or not yet started, and the	Actions from meeting were completed.

Reference	Comment	National Grid Response
	programme was shared. The Outline AMS-OWSI was discussed, and it was noted that the documents were under internal review and would be shared later that month with comments to be returned in May 2025.	
Norfolk County Council, Suffolk County Council, Essex Place Services, Braintree District Council, May 2025	This meeting was to discuss the progress of the forward programme, geophysical surveys, trial trenching and Outline AMS-OWSI (document reference 7.5). The update on the geophysical surveys provided greyscale results, including the correlation with cropmarks found near Ardleigh, and the intended programme until June 2025. The discussion of the trial trenching gave an update into the near completion of the excavations on Site 010, the amount of Romano-British archaeology that had been found in one area and access issues. The program update stated that priority areas of fieldwork were to be complete by the end of October/start of November 2025 for trial trenching and geophysics, and the various start dates of sites in June-September.	Actions from meeting were completed.
Historic England, May 2025	This meeting was a follow up to discuss medium/high value non designated assets.	The feedback received has informed the assessment in the ES (Volume 6 of the DCO application).
Norfolk County Council, Suffolk County Council, Essex Place Services, Braintree District Council, Thurrock Borough Council, Historic England, June 2025	This meeting of the Archaeology Working Group was to discuss the ongoing geophysical survey and trial trenching works, as well as to discuss the draft Outline AMS-OWSI. The number of fields that had undergone geophysical survey in May were noted, and the greyscale results were shared. There was an update on the trial trenching progress and the types of archaeology that had been found since the last meeting were discussed. Access issues were also	Actions from meeting were completed, including further information regarding attenuation ponds and approach to fieldwork post-submission shared by email.

Reference	Comment	National Grid Response
	discussed and the revised programme shared, although the priority area completion of late October/early November was still expected to be achieved. A separate meeting regarding the attenuation ponds was requested. There was an overall program update, and it was requested that comments on the draft Outline AMS-OWSI should be provided in early June.	

11.4 EIA Approach and Methods

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

Data Sources

- 11.4.2 The baseline has been informed by a desk study which has drawn on the following information sources:
- HER data for known archaeological sites, monuments, find spots and events
 - Local Planning Authority websites, viewed for information on locally listed buildings
 - Data sets of designations from Historic England's National Heritage List for England
 - Conservation areas from Historic England. Data for conservation areas were cross-referenced with the Local Planning Authority websites to ensure accurate data were used
 - Archaeological reports (grey literature) on archaeological interventions within the Order Limits as the key consideration area for archaeological potential
 - Published archaeological journals and monographs, local history books and pamphlets, including local history websites as appropriate
 - Historic maps, including OS, estate maps, enclosure maps, tithe maps and military plans
 - Aerial photography, including imagery taken for the Project in 2022
 - Historic aerial photography
 - LiDAR data
 - Protected lanes data from relevant Local Planning Authorities
 - Information on heritage assets received through Project consultation.

Study Area

- 11.4.3 As defined in the EIA Scoping Report (document reference 6.19) the Study Areas for the Historic Environment comprise the Order Limits plus a 250 m buffer for non-designated heritage assets. In addition, two wider Study Areas have been defined:
- 2 km from the Order Limits – for all designated heritage assets (scheduled monuments, Grade I, II* and II listed buildings, Grade I, II* and II registered parks and gardens and conservation areas)
 - Up to 3 km from the Order Limits – for designated assets of the highest value (scheduled monuments, Grade I and II* listed buildings and Grade I and II* registered parks and gardens).
- 11.4.4 In certain locations, and in accordance with the approach for the LVIA, including the ZTV, the 2 km and 3 km Study Areas have been increased, for example where topography allows for more distant views. This is to ensure that heritage assets, where their setting could be affected, are included in assessment.
- 11.4.5 As described in Table 11.1, the Study Areas have been discussed and agreed with stakeholders. The Study Areas are considered appropriate based on the potential effects of the Project on heritage assets, including consideration of physical effects and effects arising through change to setting from tall infrastructure. The propriety of the Study Areas is also supported by the approach to the ZTV for the landscape and visual discipline, professional judgement and previous experience of similar projects.
- 11.4.6 The Study Areas for the Historic Environment are shown on Figure 11.1: Historic Environment Study Area (document reference 6.11.F1).

Site Survey

- 11.4.7 A site walkover of the Order Limits and setting survey of designated assets within the Study Areas has been undertaken to inform the baseline and assessment in the ES (Volume 6 of the DCO application).
- 11.4.8 The site walkover survey was undertaken between spring 2023 and spring 2025. The results are presented in Annex D of Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1).
- 11.4.9 A targeted approach was used for the walkover survey, with areas scoped in or out for site visits to aid a proportionate approach to assessment. Scoping of the targeted walkover focused on areas of perceived limited modern disturbance and areas not so densely vegetated as to obscure the ground surface and local topography. The survey scoping was data-led, using desk-based information, and where ground truthing of the conditions of heritage assets would be possible. The methodology for the scoping of the walkover was included in the EIA Scoping Report (document reference 6.19) and is presented in Annex C of Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1).
- 11.4.10 The setting survey was conducted between autumn 2022 and spring 2025. The results have been used to inform the setting assessment presented in Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) and to inform the impact assessment in the ES (Volume 6 of the DCO application).
- 11.4.11 In support of the DCO application, and in consultation with the archaeological advisors to the Local Planning Authorities and Historic England (see Table 11.1),

certain portions of the Project were identified as ‘priority areas’ for archaeological evaluation fieldwork. The selection of the priority areas was based on the scale of the potential impacts of the Project construction works on archaeology, and the future ability for detailed design to microsite to avoid or reduce effects to archaeology. On this basis the underground cable, Cable Sealing End (CSE) compounds, substations and temporary construction compound works were identified as priority areas for geophysical survey and archaeological trial trenching (ATT). For geophysical survey, HER data and analysis of aerial photography and satellite imagery undertaken by the Project also identified areas with high archaeological potential that may represent medium or high value below ground assets within the Order Limits, and these locations were also identified as priority areas.

- 11.4.12 The geophysical survey commenced in summer 2023 and archaeological trial trenching has been ongoing since autumn 2024. The results of this fieldwork are presented in Appendix 11.3 EACN Geophysical Survey Report (document reference 6.11.A3), Appendix 11.4 Geophysical Survey (Priority Areas) Results Report (Rev B) (document reference 6.11.A4) and Appendix 11.5 Trial Trenching Results Report (Rev B) (document reference 6.11.A5) and incorporated in Section 11.5 to inform the baseline for assessment.
- 11.4.13 Geoarchaeological and archaeological monitoring and assessment of the Geotechnical Investigation (GI) works undertaken by the Project to date has been undertaken. An overview of the findings of this fieldwork is presented in the relevant Project sections in Section 11.5 to inform the baseline for the assessment and the full results are presented in Appendix 11.6 Geoarchaeological and Archaeological Monitoring of Ground Investigation Works Report (document reference 6.11.A6).
- 11.4.14 Table 11.2 presents details of further surveys undertaken post-March 2025.

Table 11.2 Post March 2025 surveys

Survey (and Relevant Appendix)	Survey Dates	Further Environmental Information to be Provided	When Survey Information Will Be Available	Agreement with Stakeholders
Geophysical Survey – Priority Areas (Appendix 11.4: Geophysical Survey (Priority Areas) Results Report (Rev B) (document reference 6.11.A4))	Complete	None, survey complete	This information was provided as part of the Supplementary Environmental Information update in January 2026.	Agreed

Survey (and Relevant Appendix)	Survey Dates	Further Environmental Information to be Provided	When Survey Information Will Be Available	Agreement with Stakeholders
Geophysical Survey – Phase 2	Ongoing	The results of approximately 84% of phase 2 areas ⁴	This document includes a summary of the Phase 2 geophysical survey results. The full results of the phase 2 geophysical survey are contained in Appendix 11.8: Geophysical Survey (Phase 2) Report (document reference 6.11.A8).	Agreed
Archaeological Trial Trenching – Priority Areas (Appendix 11.5: Trial Trenching Results Report (Rev B) (document reference 6.11.A5))	Ongoing	Completion of excavation and fieldwork post-examination and post-consent, to inform detailed design and enable ongoing agreement of mitigation with stakeholders. Intention that an addendum of further information to support the ES (Volume 6 of the DCO application), to include any additional baseline and assessment resulting from ATT, would contain a minimum of approximately 85% of results of post-submission fieldwork.	Further information will be provided post-examination and post-consent as archaeological evaluation progresses.	Agreed

⁴ The area completed to date is slightly lower than planned due to land access issues. The overall programme for the Phase 2 geophysical survey is not expected to be delayed.

Survey (and Relevant Appendix)	Survey Dates	Further Environmental Information to be Provided	When Survey Information Will Be Available	Agreement with Stakeholders
Archaeological Trial Trenching – Phase 2 (Appendix 11.5: Trial Trenching Results Report (Rev B) (document reference 6.11.A5))	2026	Trial trenching will continue post-examination and post-consent to inform detailed design and enable ongoing agreement of mitigation with stakeholders.	Further information will be provided post-examination and post-consent as archaeological evaluation progresses.	Agreed

Assessment Methodology

- 11.4.15 This section sets out the methodology used for assessing the effects on the Historic Environment 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). The scope of the Historic Environment assessment is provided in Appendix 5.2: Scope of the Assessment (document reference 6.5.A2).
- 11.4.16 The assessment in this chapter assumes that all mitigation – embedded (design measures), standard practice, and any additional mitigation measures (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, 2024) and the EIA Scoping Report (document reference 6.19).
- 11.4.17 Assets located outside the Order Limits, and where settings do not extend to the Order Limits, are not included in the baseline or assessment in this chapter, as there would be no potential for effects resulting from the Project. These assets are described in Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1).
- 11.4.18 The vibration assessment for construction and operation (and maintenance) within Chapter 14: Noise and Vibration (document reference 6.14) indicates that there is one historic structure (Little Bromley War Memorial (**1493299**) and no buildings in Section C) where there is the potential for damage due to construction vibration. This would be reviewed by the Main Works Contractor(s) in their specific detailed assessments prior to the start of works. Therefore, potential effects from vibration do not affect the proposed scoping of any individual listed buildings or non-designated historic buildings. Commitments in the Outline CoCP (document reference 7.2) ensure that should the review by the Main Works Contractor(s) identify any potential for vibration related damage, measures to monitor this pre-start, during and on completion of works would be undertaken and should any damage occur, this would be repaired.

Value/Sensitivity

- 11.4.19 The term ‘value’ is used to describe the importance of a heritage asset, in preference to the term ‘significance’ in order to avoid confusion with the similar terminology, in particular ‘significant effects’ as commonly used in EIA.
- 11.4.20 The value of a heritage asset derives from the asset’s ability to illustrate one or more of the Conservation Principles, described in Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment (Historic England, 2008). The contribution of setting to the value of a heritage asset is also considered as part of the assessment of value, as per The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3 (Second Edition) (Historic England, 2017). The criteria in Table 11.3 have been used to guide the assessment of value, and have been developed based on relevant industry guidance including Guidance on Heritage Impact Assessments for Cultural World Heritage Properties (ICOMOS, 2011), Guidance and Toolkit for Impact Assessment in a World Heritage Context (United Nations Educational, Scientific and Cultural Organization (UNESCO), International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), ICOMOS and International Union for Conservation of Nature (IUCN), 2022) and DMRB LA 104 (National Highways, 2020) and LA 106 (National Highways, 2020a). In all cases professional judgement has been used and where appropriate, assigned values may vary from the examples presented in the table, with appropriate justification provided where this is the case.
- 11.4.21 The approach to the value of designated heritage assets is informed by the division presented in both NPS EN-1 (DESNZ, 2024a) and the National Planning Policy Framework (Ministry of Housing, Communities and Local Government, 2024), which refer to ‘*assets of the highest significance, including Scheduled Monuments; Protected Wreck Sites; Registered Battlefields; grade I and II* Listed Buildings; grade I and II* Registered Parks and Gardens; and World Heritage Sites*’.

Table 11.3 Heritage value assessment criteria

Value/Sensitivity	Examples
Very High	World Heritage Sites (including nominated sites) inscribed for their cultural heritage importance Assets that can contribute significantly to acknowledged international research objectives Assets of acknowledged international importance
High	Scheduled monuments (including proposed sites) Grade I and II* listed buildings Grade I and II* registered parks and gardens Registered battlefields Conservation areas containing buildings of predominantly high value Non-designated assets of the quality and importance to be designated as scheduled monuments Assets that can contribute significantly to acknowledged national research objectives

Value/Sensitivity	Examples
Medium	Grade II listed buildings Grade II registered parks and gardens Conservation areas containing buildings of predominantly medium value Assets that contribute to regional research objectives and/or have exceptional quality in their fabric or historical associations
Low	Locally listed buildings, or those of equivalent quality in their fabric or historical associations Assets of local importance Assets compromised by poor preservation and/or poor survival of contextual associations Assets of limited value, but with potential to contribute to local research objectives
Negligible	Assets with very little or no surviving archaeological/historical interest Buildings of no architectural or historical note; buildings of an intrusive character
Unknown	The importance of the resource has not been ascertained/is inaccessible

Impact Magnitude

- 11.4.22 Where there is potential for an impact to a heritage asset resulting from the Project, these assets have been assessed, and the results are presented within this chapter and Appendix 11.2 Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2). The assessment has used the value assigned to heritage assets in the Historic Environment Baseline Report (document reference 6.11.A1) and then assigned a magnitude of impact.
- 11.4.23 Impacts to heritage assets have the potential to arise from: construction activity, including creation and use of access routes and traffic management, temporary construction compounds and working/storage areas; and the operational (and maintenance) presence of the overhead line/underground cable and associated infrastructure. In addition, the potential impact of other environmental mitigation, such as ecological habitat creation or landscape planting, have been assessed for any impact to heritage assets.
- 11.4.24 The terminology for describing the magnitude of impact is presented in Table 11.4.

Table 11.4 Criteria for quantifying the magnitude of impact to heritage assets

Magnitude of Impact (Term)	Criteria of Impact
High	Change to most or all key archaeological materials, such that the resource is totally altered Change to key historic building elements, such that the resource is totally altered Comprehensive changes to setting of archaeology, built heritage or designated or non-designated landscapes

Magnitude of Impact (Term)	Criteria of Impact
Medium	Changes to many key archaeological materials, such that their source is clearly modified Change to many key historic building elements, such that the resource is significantly modified Changes to the setting of an historic building, such that it is significantly modified Considerable changes to setting that affect the character of the asset or designated or non-designated landscapes
Low	Changes to key archaeological materials, such that the asset is slightly altered Slight changes to setting of archaeological sites Change to key historic building elements, such that the asset is slightly different Change to setting of an historic building, or designated or non-designated landscapes, such that they are noticeably changed
Negligible	Very minor changes to archaeological materials or setting Slight changes to historic building elements or setting that hardly affect it Slight changes to designated or non-designated landscape setting
No change	No change

11.4.25 The settings of all high and medium value designated assets have been assessed and where appropriate the magnitude of impact of the Project on the asset as a result of change within its setting has been assessed in EIA terms. The settings of all high and medium value non-designated assets have also been assessed and where either an asset intersects with the Order Limits or the setting of an asset within the Study Area has been assessed to extend to the Order Limits, the impact of the Project on the asset as a result of change within its setting has also been assessed in EIA terms. The settings of all negligible and low value non-designated assets have not been assessed nor those non-designated assets of medium or high value outside the 250 m Study Area, due to the lack of potential for any impacts to these assets to result in significant effects. This approach has been discussed and agreed with stakeholders in February 2025 as detailed in Table 11.1.

Significance

- 11.4.26 Likely significant effects have been derived using professional judgement considering the sensitivity (or value) of the receptor within the Study Areas, and the magnitude of change (impact) likely to be caused by the activities of the Project. These factors are combined to give an overall significance of effect.
- 11.4.27 Significance of effect has been derived using the matrix below (Table 11.5) This has been supplemented by professional judgement which, where applicable, has been explained to give the rationale behind the values assigned. Likely significant effects, in the context of the EIA Regulations, are effects of moderate or major significance.

Table 11.5 Historic Environment significance of effects matrix

		Value of Heritage Asset				
		Very High	High	Medium	Low	Negligible
Magnitude of impact	High	Major	Major	Major to moderate	Moderate to Minor	Minor
	Medium	Major to Moderate	Major to Moderate	Moderate	Minor	Negligible
	Low	Major to Moderate	Moderate to Minor	Minor	Negligible	Negligible
	Negligible	Minor	Minor	Negligible	Negligible	Neutral
	No Change	Neutral	Neutral	Neutral	Neutral	Neutral

- 11.4.28 The impact assessment presented in this chapter and Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2) presents the impact using the EIA terminology as agreed in the EIA Scoping Opinion (document reference 6.20). In order to ensure accordance with the NPS (EN-1) assessment of harm to designated assets is presented in Appendix 11.7: Assessment of Harm to Designated Heritage Assets (document reference 6.11.A7). No direct equivalence is drawn between the EIA terminology used in this chapter and degrees of harm as presented in Appendix 11.7: Assessment of Harm to Designated Heritage Assets (document reference 6.11.A7). The methodology for the assessment of harm to designated heritage assets is set out in Appendix 11.7.

Limitations of Assessment

- 11.4.29 This assessment was compiled using heritage data obtained from third-party sources and the prediction of effects in this chapter is based on the accuracy of the data. However, this information was supplemented with an archaeological walkover, archaeological investigations, archive research and study of LiDAR, aerial photography and consultation with stakeholders, and is therefore considered to present a robust basis for assessment.
- 11.4.30 The archaeological record can contain evidence of varying reliability. Antiquarian excavations (excavations carried out prior to the establishment of modern scientific methods) were conducted to standards that differ from modern investigations. The results of these investigations can no longer be verified where the remains no longer exist.
- 11.4.31 The archaeological walkover was carried out within the Order Limits, where access was granted by landowners. Permission to carry out the walkover was sought for the whole of the Order Limits and access was taken for all areas where this was granted, and land was suitable for survey. Approximately 97% of scoped in fields have been surveyed.
- 11.4.32 Geophysical survey and archaeological trial trenching are ongoing. Access for all priority geophysical survey areas has been sought although height of crops has affected a small proportion of completion even where access was granted. On the basis of the results from the complete fieldwork to date and the information from other sources it is believed that the historic environment baseline presents a reasonable basis for assessment, but further information is forthcoming.

Key Parameters for Assessment and Assumptions

11.4.33 This section describes the key parameters and assumptions that have been used/assumed when undertaking the assessment presented within this chapter. The assumptions are based on information presented within Chapter 4: Project Description (document reference 6.4) and include:

- Based on HER and other desk-based data regarding archaeological fieldwork, cropmarks and findspots within the Study Areas and Order Limits, it is assumed that there is high potential for currently unrecorded archaeological remains to be located within the Order Limits. The information obtained to date from desk-based assessment and field investigations provides sufficient detail to characterise the likely nature and extent of any currently unrecorded remains. If currently unrecorded archaeological remains are discovered during construction of the Project, appropriate and proportionate mitigation measures would be carried out in accordance with the Outline Archaeological Mitigation Strategy and Outline Written Scheme of Investigation (AMS-OWSI) (document reference 7.5). This is likely to take the form of archaeological excavation and recording
- The walkover survey area is principally made up of arable fields. It is acknowledged that there are limitations in identifying features of archaeological interest within ploughed fields due to modern agricultural practices, which are likely to have truncated or removed above ground earthworks or other evidence of heritage assets. While it is acknowledged that artefacts brought to the surface from ploughing have the potential to provide evidence for the location of archaeological sites, the purpose of the walkover survey was to ground truth site conditions and not to conduct a systematic fieldwalking exercise
- For the purposes of the Historic Environment assessment, it is assumed that standard construction methods would be employed for creation of construction works areas, haul roads and temporary construction compounds, and third-party infrastructure working areas and access routes, unless this is otherwise stated in the assessment. Standard construction methods are assumed to cause removal of all near-surface archaeology within the footprint of the works, but no impacts to deeply buried remains. In areas where the only works are those required for ecological or landscape mitigation it is assumed that creation of ponds/scrapes or areas of tree planting would cause disturbance of all near-surface archaeology.

11.5 Baseline Conditions

11.5.1 Baseline conditions have been gathered from desk-based information (see Section 11.4) and presented with reference to the section of the Project within which they are located.

Existing Baseline

11.5.2 Non-designated heritage assets and conservation areas are referenced using a consistent Project specific identification number in this chapter and all appendices. The monument identification number (MonUID) from the originating organisations is provided in a gazetteer in Annex B of Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) for cross reference. Designated assets are referenced by their National Heritage List Entry numbers. Detailed descriptions of

the heritage assets are also provided in Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1).

Section A: South Norfolk Council

Summary of Desk-Based Assessment

- 11.5.3 Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) provides a detailed overview of the heritage assets within the defined Study Areas for Section A and a discussion of the prehistoric and historical development of the landscape within this section of the Project. A summary is set out below.

Designated Heritage Assets

- 11.5.4 There are no World Heritage Sites and no registered battlefields within the Study Area in Section A. Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) has identified six scheduled monuments, 391 listed buildings, two registered parks and gardens and nine conservation areas within the Study Area in Section A. The Historic Environment Baseline Report has established that there would be no impact on the majority of these assets as their settings do not extend to the Order Limits, with the exception of the following, which are shown on Figure 11.2: Designated Heritage Assets Assessed in the ES Chapter (Rev B) (document reference 6.11.F2):

- One high value scheduled monument
 - ‘Venta Icenorum: Roman town and associated prehistoric, Anglo-Saxon, and Medieval remains’ (**1021463**)
- Four high value Grade I listed buildings
 - ‘Church of All Saints’, Tacolneston (**1178820**)
 - ‘Church of All Saints’, Tibenham (**1049992**)
 - ‘Church of St Mary’ (**1180035**)
 - ‘Church of St Remigius’ (**1050237**)
- One high value Grade II* listed building
 - ‘Flordon Hall’ (**1050698**)
- 39 medium value Grade II listed buildings
 - See Historic Environment Baseline Report (document reference 6.11.A1) for details
- Two medium value conservation areas
 - ‘Tacolneston Conservation Area’ (**CA19**)
 - ‘Winfarthing Conservation Area’ (**CA20**).

Non-Designated Heritage Assets

- 11.5.5 Details of medium, low and negligible value non-designated assets within the Order Limits in Section A are detailed within this section. In addition, details of non-designated assets of medium value within the Study Area whose settings extend to

the Order Limits are also provided. These assets are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3). Details of negligible/low value non-designated assets located outside the Order Limits but within the Study Area are reported in the Historic Environment Baseline Report (document reference 6.11.A1).

- 11.5.6 There are 112 non-designated heritage assets of prehistoric to modern date, mostly of medium to negligible value, recorded in the Norfolk HER within -the Order Limits in Section A, therefore potentially impacted by the Project. This includes 10 high value non-designated assets related to the Scheduled Monument – Venta Icenorum (**1021463**).
- 11.5.7 There are also 20 medium value non-designated assets outside the Order Limits but within the Study Area where their settings extend to the Order Limits.
- 11.5.8 The 112 medium to negligible value non-designated assets within the Order Limits and potentially impacted by the Project are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:
- Sixty-two miscellaneous artefact findspots
 - Two findspot scatters suggestive of burnt mounds
 - Three artefact scatters suggestive of settlement activity
 - Two artefact scatters suggestive of funerary activity
 - Nine archaeological evaluations revealing below ground remains
 - Five excavated archaeological features suggestive of peripheral/agricultural activity
 - Two excavated archaeological features suggestive of settlement
 - One excavated archaeological feature suggestive of funerary activity
 - Eight cropmark complexes suggestive of agricultural practices
 - Two cropmark complexes suggestive of settlement activity
 - Two cropmark complexes suggestive of funerary activity
 - Two moats
 - Earthworks suggestive of settlement activity
 - Two 20th century military assets
 - Four probable archaeological anomalies identified through geophysical surveys
 - A ruined building
 - A former parkland
 - Two assets derived from documentary/cartographic sources including a Deserted Medieval Village
 - A railway.
- 11.5.9 The medium value non-designated assets with settings extending to the Order Limits, are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:

- A moat
- A building suggested by a finds scatter
- The sites of three former churches
- Three cropmark complexes, including a trackway, associated with a deserted medieval village
- The cropmarks of three possible Bronze Age round barrows
- Six assets associated with the Scheduled Monument 'Venta Icenorum: Roman town and associated prehistoric, Anglo-Saxon, and Medieval remains' (**1021463**)
- Two Roman roads
- The cropmark of a possible henge monument.

11.5.10 In addition to the cropmark complexes included in the Norfolk HER noted above, there are a further 33 non-designated low value cropmark complexes within the Order Limits of Section A that have been identified by the Project through the analysis of aerial images. These assets largely comprise former low value field boundaries and enclosures noted on 19th and 20th century OS mapping. This includes the cropmark of a possible medium value henge monument (1543) which has also been identified within the Order Limits and Study Area with its setting extending to the Order Limits, as shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3).

11.5.11 There are 87 negligible or low value non-designated features within the Order Limits of Section A identified through a review of historic maps. The settings of these assets are not considered due to their values. These assets are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3) and comprise:

- Forty-three pond sites
- Eight parish boundaries
- Seventeen hedgerows
- Seven woodlands, including a woodland containing ponds
- Five buildings and/or building grounds
- Two mineral extraction pit complexes
- A railway
- An estate boundary
- An undefined boundary
- An enclosed field system with important hedgerows
- A trigonometry point.

Historic Landscape Characterisation

11.5.12 The historic landscape of the Project has been considered using a holistic approach aligned with the European Landscape Convention's (ELC) definition of landscape as '*an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*' (ELC, Chapter I, Article 1). This approach

makes use of nationally recognised Historic Landscape Characterisation (HLC) data to identify 'Historic Landscape Types' (HLTs) within the Project and its surrounding areas which have been divided into individual 'Historic Landscape Units' (HLUs) across the Project. Using this approach, HLTs and HLUs intersecting with the Section A Order Limits in Norfolk have been organised thematically into the following historic landscape categories which are assessed:

- Farming (enclosed land)
- Woodland
- Inland – managed wetland
- Commons, wastes, heaths
- Industry.

Farming (enclosed land)

11.5.13 This landscape is of low value. Farming of the land has been a continuous means of managing the landscape for centuries. Although evidence as early as the Mesolithic is present within the Study Area for human interaction with the landscape, an understanding of farming is present from the medieval period onwards. Character types within farming are influenced by field patterns and four identifiable types have been identified in Section A:

- Pre-18th century enclosure: As a broad group these 'Anciently Enclosed Fields' or pre-18th century enclosures has a sparse distribution pattern. They rarely survive, and even as an altered type, the distribution is limited and scattered forming loose clusters. Where they have survived, it is often as residual boundaries within the enclosure patterns of the later 18th to 19th century enclosure, but they were further degraded by the changes in the mid-20th century. There are five units of pre-18th century enclosure within the Order Limits of Section A of the Project located east of Shelfanger, north-east of Shelfanger, north of Flordon, and two to the west of Flordon
- 18th-19th century enclosure: This period of enclosure had a major impact on the Norfolk landscape. Much of the character of Norfolk emanates from this period of agrarian reform with the associated large estates, many of which had earlier origins. The various forms of 'Lately Enclosed Fields' cover the majority of the county. This period of enclosure has had a far greater effect on the earlier 'Anciently Enclosed' landscape of Norfolk than anything else. There are 47 units of 18th-19th century enclosure within the Order Limits of Section A of the Project, distributed roughly evenly across the section
- 20th century agriculture: Twentieth century field types comprise large-scale animal farms, boundary loss and new field boundaries. They have had a major impact across the county. Due to their recent nature, they exist mostly as current forms – there being rare relict elements that have been subjected to even more recent changes and thus rendered 'relict'. There are 113 units of 20th century agriculture within the Order Limits of Section A of the Project, distributed frequently and evenly across the section
- Inland – drained enclosure: Anciently enclosed grazing marsh with curvilinear boundaries. There is a single unit of Inland – drained enclosure within the Order

Limits of Section A of the Project. This is located on the northern flank of the Waveney Valley.

Woodland

- 11.5.14 This landscape is of low value. The Project Order Limits within South Norfolk contain eight pockets of woodland, varying in size and date. The woodland areas are made up of the following main landscape types:
- 18th-20th century woodland plantation: The distribution pattern of woodland varies across the county. There are few mapped relict areas of lost woodland, however modern plantations are predominant. There are seven units of 18th-20th century woodland plantation within the Order Limits of Section A of the Project. Two are located west of Swardeston, three to the north of Flordon, and two to the south of Bunwell Hill
 - Carr woodland: There is a single unit of carr woodland within the Order Limits of Section A of the Project. This is located south of Shelfanger.

Inland – managed wetland

- 11.5.15 This landscape is of low value. There is a significant wetland resource of sinuous meadows flanking the rivers of the county, of which full advantage has been taken in the past and present. These naturally follow the courses of the various rivers across Norfolk and have not been subject to extensive drainage. Inland managed wetlands in Section A are represented by the following HLC type:
- Inland – managed wetland: There are five units of managed enclosed wetland within the Order Limits of Section A of the Project, located west of Flordon, north-east of Tacolneston, south of Bunwell Hill, and two to the south of Shelfanger.

Commons, wastes and heaths

- 11.5.16 This landscape is of low value. Commons, wastes and heaths are a significant grouping in Norfolk being widely distributed across the county and are reflections of the best use of marginal lands, which were too poor in quality for other agricultural use. These marginal lands were the legacy of previous glaciations and became the focal areas for grazing within predominantly more fertile arable areas and were once found throughout Norfolk. Commons, wastes and heaths in Section A are represented by the following HLC type:
- Commons, wastes, heaths: There are two commons with open margins within the Order Limits of Section A of the Project, located west of Flordon and north of Winfarthing.

Industrial

- 11.5.17 This landscape is of low value. Industrial areas are few, often associated with agriculture (e.g. canning, mills) and scattered throughout the county, as it is a primarily agricultural, rural county with few large towns with no heavy industry. Some new growth areas are contained within former airfields; the buildings being re-used for light industry. Industry in Section A is represented by the following HLC type:
- Industrial: There is a single industrial HLC unit within the Order Limits of Section A of the Project. This comprises the Norwich Main Substation.

Protected Lanes

- 11.5.18 There are three low value non-designated protected lanes of medieval date recorded by South Norfolk Council within the Order Limits in Section A, therefore potentially impacted by the Project.

Geophysical Survey

Phase 1 Priority Geophysical Survey

- 11.5.19 Full details of the Phase 1 priority geophysical results, including a location figure, are provided in Appendix 11.4: Geophysical Survey (Priority Areas) Results Report (Rev B) (document reference 6.11.A4). A summary is provided in this section. Seven geophysical survey priority areas⁵ are located within the Study Area of Section A, which are shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.20 The first and northernmost priority geophysical survey area includes pylons RG3 to RG9, pulling locations associated with pylons RG3, RG5, RG7 and RG8, eight sustainable drainage systems (SuDS) basin locations, overhead line mitigation works, two overhead line crossing protection works areas, bellmouth works and the temporary haul road. The geophysical survey of this area has been completed revealing undated enclosures, linear features, and field boundaries, as supported by features present within the non-designated data (**1271**, **1232**, **1364**, **1255**, **1254** and **1222**). Also noted are several discrete features possibly indicating extraction (i.e. quarry) features and multiple possible pit-like responses. No pattern can be discerned from these features suggesting that these are not related to settlement activity. One asset, (1152), was identified in this priority area which was not located within the above noted assets. Asset (1152) comprises undated 'archaeological' and 'possible archaeological' anomalies forming three sides of an enclosure with several internal discrete and linear anomalies located at and adjacent to pylon RG7 features and an external linear anomaly, likely representing agricultural activity. This asset is located within the footprint of the temporary haul road and pylon RG7. This asset is of low value based on its evidential value.
- 11.5.21 The second priority geophysical survey area includes pylons RG11 to RG14, six SuDS basin locations, overhead line mitigation works, two overhead line crossing protection works areas, bellmouth works and the temporary haul road. The geophysical survey of this area has been completed revealing undated enclosures, some likely representing settlement (house plots and anomalies likely to indicate areas of burning (**1010**)), field boundaries and trackways, as well as archaeological and possible archaeological features (**1287**, **1010** and **1366**). An area of quarrying can be seen on historic mapping; this can also be seen in the survey results immediately south of Brick Kiln Lane.
- 11.5.22 The third priority geophysical survey area is located between pylons RG22 and RG23, and includes one SuDS basin location, overhead line mitigation works, one overhead line crossing protection works area, bellmouth works and the temporary haul road. The geophysical survey of this area has been undertaken, revealing a field boundary and linear features (**1511**) between RG22 and RG23. An additional

⁵ Areas which may experience an impact from proposed underground cable, cable sealing end compounds, temporary construction compounds, substation works or due to the likely medium or high value potential of known archaeological features

geophysical survey area is located c. 1.2 km to the north-north-west, at the junction of Wymondham Road and the B113, and includes a highway mitigation construction compound at Wymondham Rd/B1113 Junction (near Mulbarton). The geophysical survey of this area has been undertaken, revealing a small group of anomalies of uncertain origin.

- 11.5.23 The fourth priority geophysical survey area covers the land on the northern and southern side of Fundenhall Road and between pylon RG28 and RG31. The survey area incorporates pylons RG28, RG29 and RG30, three SuDS basin locations, overhead line mitigation works, two overhead line crossing protection works areas a construction laydown area, bellmouth works and the temporary haul road. The geophysical survey of the southern area has been completed and has revealed a sub-square enclosure, probably associated with Early Saxon cemetery, Romano-British settlement and multi-period finds (**1130**), within this enclosure was a large of disturbance interpreted as a pond (as seen on historic OS maps). Surrounding the pond are four irregularly shaped areas of low magnetic enhancement likely to be localised extraction (i.e. quarrying). Also, within this area is an 'L' shaped ditch like feature and a small cluster of pit-type anomalies, these could be associated with medieval (**1176** and **1119**) and post medieval findspots (**1119**). Also identified were field boundaries, discrete features and a possible trackway (**1504** and **1506**).
- 11.5.24 The fifth priority geophysical survey area covers two areas, one to the north and one to the south of Long Row. The northern area, known as Diss Road, near RG56, South Norfolk (RG-Sate1) covers the land between Diss Road, Blackburn Road and Long Row B1134. It incorporates pylons RG55 to RG57, two SuDS basin locations, overhead line mitigation works, an overhead line crossing protection works area, temporary construction compound (RG-Sate1), utility connections (should it be needed), bellmouth works, and the temporary haul road. The geophysical survey of this area has been completed, revealing likely medieval strip fields (**1072**) and later field boundaries (**1522**), as well as a cluster of linear and rectilinear ditch-like anomalies in the south of the area that may represent settlement activity associated with the medieval field system. The northern portion of the survey area fell within the bounds of a World War One military airfield (**1037**) but no anomalies were identified that might relate to this asset. The southern part of the survey area south of Long Row incorporates pylon RG58, one SuDS basin location, a construction laydown and the temporary haul road. The portion of the priority geophysical survey area to the south of Long Row incorporates pylon RG58, a construction laydown area, a SuDS basin location, bellmouth works, and the temporary haul road. The geophysical survey of this area has revealed linear field boundaries (**1523**) identified as cropmarks by the Project and likely representing medieval strip fields with some post medieval elements. The survey also identified anomalies of uncertain and agricultural origins.
- 11.5.25 The sixth priority geophysical survey area, to the east of Shelfanger, is focused on pylon RG69 and land to the north and incorporates the pylon, one SuDS basin location and the temporary haul road. The geophysical survey of this area has been completed revealing features of an agricultural landscape including undated field boundaries (**1529** and **1024**), field drains and pit-like features. A high magnitude discrete response and small spread of magnetic disturbance recorded within the southern section of this area lies at the edge of a possible medieval or post medieval moat (**1024**).
- 11.5.26 The seventh priority geophysical survey area straddles the border between Norfolk (Section A) and Suffolk (Section B). The northern part of the geophysical survey area

in Section A, covers land within the Waveney Valley north of the river and incorporates pylons RG84 to RG88, pulling locations associated with pylons RG85 and RG87, an alternative underground cable alignment, six SuDS basin locations, overhead line mitigation works, overhead line crossing protection work areas, bellmouth works, a construction laydown area and the temporary haul road. The geophysical survey of this area has been completed revealing undated anomalies suggestive of an enclosure, linear features and field boundaries (**1513** and **1013**) and infilled ponds. A spread of magnetic disturbance located within the central part of this area could relate to a medieval moat (**1013**). Also noted were sinuous natural responses suggesting that these are former natural river channels from the River Waveney.

Phase 2 Geophysical Survey

- 11.5.27 Full details of the results, including a location figure, are provided in Appendix 11.8: Geophysical Survey (Phase 2) Report (document reference 6.11.A8). A summary of the results is provided in this section, and the progress of the geophysical survey is shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.28 The Phase 2 geophysical survey in Section A was focused on the temporary haul road, the pylon working areas and the SuDS basin locations in the District of South Norfolk between pylon RG1 at the Norwich Main Substation in the north to pylon RG88 at the Norfolk/Suffolk border in the south. There are some gaps in the data due to: archaeological work (geophysical survey and trial trenching) unrelated to the Project already undertaken (RG1 – RG5, RG13 and haul road between RG13 and RG14); no haul road (RG24 – RG25), refused access/unsuitable ground conditions (RG23 – RG24, RG46 – RG48, RG53 – RG54, haul road between RG59 and RG60, RG83).
- 11.5.29 The Phase 2 geophysical survey of Section A has informed known HER assets and this is particularly the case in the locations of Gowthorpe (**1232**) and Kenningham (**1010/1227**) deserted medieval villages where strong archaeological anomalies have been identified. Elsewhere, anomalies indicative of archaeological remains have been identified where findspots recorded on the Norfolk HER suggest Romano-British, early Saxon and medieval activity (**1218**, **1364**, **1130**, **1072**). The survey has confirmed and/or expanded known cropmark sites mapped by the Project (**1540**, **1541**, **1542**, **1509**, **1508**, **1511**, **1507**, **1506**, **1504**, **1545**, **1505**, **1502**, **1500**, **1516**, **1517**, **1519**, **1546**, **1522**, **1523**, **1525**, **1526**, **1528**, **1529**, **1531**, **1532**, **1535**, **1524**, **1513**). Across the survey area anomalies indicative of field drains, ploughing, former ponds, magnetic disturbance, and natural variations were also identified. The survey also identified anomalies of ‘archaeological’, ‘possible archaeological’ and ‘uncertain’ origin and where these features fall outside known assets or where they are incongruous with the nature of the asset they fall within, they have been identified as new assets. The new assets identified by the Phase 2 geophysical survey comprise:
- Asset (**1165**) comprises undated ‘uncertain origin’ anomalies forming three sides of an undated enclosure located within the path of the temporary haul road between pylons RG18 and RG19. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
 - Asset (**1387**) comprises undated ‘uncertain origin’ anomalies forming linear and curvi-linear features located between pylons RG31 and RG32. A non-

archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value

- Asset (**1388**) comprises undated ‘uncertain origin’ anomalies forming two sides of a possible small enclosure with an internal linear anomaly, located within the temporary haul road adjacent to pylon RG39. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
- Asset (**1389**) comprises undated ‘uncertain origin’ anomalies forming two sides of a possible small enclosure with two external discrete features, located within temporary haul road and pylon RG43. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
- Asset (**1390**) comprises undated linear and discrete ‘archaeological’ and ‘possible archaeological’ anomalies north and south of Bressingham Road, located adjacent to the temporary haul road and within the working area for pylon RG82. The nature of the asset is difficult to ascertain as the evidence suggests the majority of the asset lies outside the survey area to the east. This asset is of low value based on its evidential value
- Asset (**1391**) comprises undated ‘archaeological’ and ‘possible archaeological’ anomalies forming conjoined enclosures and discrete features suggesting occupation, located within the temporary haul road adjacent to RG80. The asset is located within two HER assets, (1293) and (1025), which comprise multi-period metal detector finds assemblages dominated by Romano-British and medieval material, suggesting two possible dates or phased activity for asset (1391). This asset is of medium value based on its evidential value
- Asset (**1392**) comprises undated linear ‘possible archaeological’ anomalies forming two sides of a possible enclosure with a southern entrance, located within a laydown compound west of pylon RG22. This asset is of low value based on its evidential value.

Archaeological Trial Trench Survey

- 11.5.30 One priority archaeological trial trenching area is located within Section A. The area is located within the fifth priority geophysical survey area and incorporates pylons RG56 and RG57, as well as some of those elements of the Project identified relating to the fifth priority geophysical survey area noted above.

Area 04

- 11.5.31 Area 04 is located north of the B1134 Long Row road and c. 2.4 km south-west of Tibenham. The area encompasses pylons RG56 and RG57, a construction laydown area, a SuDS basin location, bellmouth works, and the temporary haul road. The complex of geophysical anomalies in the southern portion of the geophysical survey area has been avoided through design avoidance measures and to preserve the remains in situ as they likely represent the remains of a farmstead.
- 11.5.32 Thirty-four trenches were excavated revealing two discrete features and 21 linear features. The features comprised ditches of the medieval field system, a possible associated droveway, rubbish pits, and later post medieval field boundaries (**1072**, **1522**). The finds assemblage comprises ceramic building material, pottery, animal bone and metal objects suggesting the avoided geophysical anomalies in the southern portion of the evaluation area do represent an area of settlement.

- 11.5.33 Further detail is included in Table 11.2 in relation to further environmental information to be provided.

Geoarchaeological and Palaeoenvironmental Assessment

- 11.5.34 A programme of geoarchaeological monitoring on geotechnical investigation groundworks was undertaken to determine the potential for deposits of geoarchaeological and palaeoenvironmental significance that may be impacted by development. A total of 15 geoarchaeological investigation interventions were monitored to produce deposit models across arable and pastoral fields within the Waveney Valley, detailed in Appendix 11.6: Geoarchaeological and Archaeological Monitoring of Ground Investigation Works Report (document reference 6.11.A6). These models cover an area across Sections A and B straddling the border between Norfolk and Suffolk on the banks of the River Waveney.
- 11.5.35 The modelling revealed that the chalk bedrock was overlain by a complex sequence of superficial geological deposits relating to past fluvial, glacial and lacustrine environments, that were commonly capped by combinations of made ground, topsoil, Alluvium and River Terrace Deposits.
- 11.5.36 The earliest deposits overlying the bedrock are unlikely to contain archaeological material, having been formed prior to c. 700,000 BP. However, following that, further cycles of glacial and interglacial periods deposited fluvial deposits and tills across the landscape. Till was recorded across the valley in all but two boreholes. This was followed by fluvial settlements generated by glaciofluvial meltwater and then finer-grained sediments that suggest that formation of a lake. These finer-grained sediments are possibly organic and have the potential to contain palaeoenvironmental information.
- 11.5.37 This was then followed by a further phase of more coarse material associated with a phase of glaciation. Later accumulations of coarse material with no Alluvium suggest a rapidly mobile channel system within the valley floor. Later Alluvium and peat forming on the river terraces are indicative of warmer water-logged environments most likely formed during the Holocene period. Both deposits have the potential to preserve organic material well and may provide good evidence for the human environment.
- 11.5.38 Deposits of palaeoenvironmental and geoarchaeological interest identified across the valley include Alluvium, peat, lodge farm clay and silt deposits as well as possible interglacial lacustrine deposits. Tufa deposits were also locally present within uppermost alluvial layers, which often contain fossils and other evidence of past environmental conditions.

Section B: Mid Suffolk District Council

Summary of Desk-Based Assessment

- 11.5.39 Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) provides a detailed overview of the heritage assets within the defined Study Areas for Section B and a discussion of the prehistoric and historical development of the landscape within this section of the Project.

Designated Heritage Assets

11.5.40 There are no World Heritage Sites and no registered battlefields within the Study Area in Section B. Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) has identified 14 scheduled monuments, 516 listed buildings, one registered park and garden and nine conservation areas within the Study Area in Section B. The Historic Environment Baseline Report has established that there would be no impact on the majority of these assets as their settings do not extend to the Order Limits with the exception of the following, which are shown on Figure 11.2: Designated Heritage Assets Assessed in the ES Chapter (Rev B) (document reference 6.11.F2):

- One high value scheduled monument
 - Offton Castle (**1006049**)
- Eight high value Grade I listed buildings
 - ‘Church of St Mary’, Battisford (**1033018**)
 - ‘Church of St Mary’, Badley (**1231082**)
 - ‘Church of St Mary’, Barking (**1231756**)
 - ‘Church of St Mary’, Offton (**1263030**)
 - ‘Church of St Peter’, Creeping St. Peter (**1352072**)
 - ‘Church of St Nicholas’, Gipping (**1352278**)
 - ‘Church of St Mary’, Gislingham (**1033123**)
 - ‘Church of St Mary’, Rickingham Inferior (**1097030**)
- Four high value Grade II* listed buildings
 - ‘Roydon Hall’ (**1033215**)
 - ‘Church of St Mary The Virgin’, Mellis (**1181735**)
 - ‘Barn 30 metres North West of Roydon Hall’ (**1284584**)
 - ‘Creeping Hall’ (**1352073**)
- One hundred and sixteen medium value Grade II listed buildings
 - See Historic Environment Baseline Report (document reference 6.11.A1) for details
- Two medium value conservation areas
 - ‘Badley Church Green Conservation Area’ (**CA45**)
 - ‘Mellis Conservation Area’ (**CA47**).

Non-Designated Heritage Assets

11.5.41 Details of high, medium, low and negligible value non-designated assets within the Order Limits in Section B are detailed within this section. In addition, details of non-designated assets of high/medium value within the Study Area whose settings extend to the Order Limits are also provided. These assets are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document

reference 6.11.F3). Details of negligible/low value non-designated assets located outside the Order Limits but within the Study Area are reported in the Historic Environment Baseline Report (document reference 6.11.A1).

11.5.42 There are 118 non-designated high to negligible value heritage assets of prehistoric to modern date recorded in the Suffolk HER within the Order Limits of Section B, and therefore, potentially impacted by the Project. These are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:

- One site of possible Mesolithic occupation
- One cropmark of a possible Neolithic long barrow
- One site of possible Iron Age activity
- One site of Neolithic settlement activity
- Two Roman roads
- Three scatters of Romano-British finds that are indicative of settlement activity
- One cropmark of a moat
- One former moat
- One L-shaped moat
- An Anglo-Saxon findspot
- Two sites of early medieval and medieval remains indicative of settlement and agricultural activity
- One site of post medieval pottery production
- One post medieval landscaped park
- Three farmsteads
- Four prehistoric flint scatter sites indicative of settlement activity
- A Neolithic flint scatter indicative of settlement activity
- A Bronze Age flint scatter indicative of settlement activity
- Three findspots indicative of Bronze Age settlement activity
- A findspot of late Iron Age to Roman settlement activity
- Fourteen findspots of Romano-British settlement activity
- One Roman road
- Three findspots of early medieval settlement activity
- An area of medieval agricultural activity
- Twelve findspots of medieval settlement activity
- Two findspots of post medieval finds indicative of settlement activity
- Remains of a post medieval settlement/agricultural activity
- One post medieval kiln

- A multi-period asset scatter
- Three findspots of undated religious accessories
- One findspot of undated jewellery
- Four findspots of undated finds indicative of settlement activity
- Seven cropmark sites indicative of agricultural activity
- Five cropmark sites indicative of settlement activity
- Six woodlands
- Three former village greens
- One extant village green
- One area of cropmarks of a moated site
- Eight farmsteads
- Three barns
- One former railway route
- Two extant railway routes
- One canal route
- One former military site
- Five Portable Antiquities Scheme (PAS) findspots.

11.5.43 There are 56 medium value assets that are within the Study Area and whose settings extend to the Order Limits as shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3):

- One scatter site of Palaeolithic and Mesolithic flint indicative of settlement activity
- One cropmark of a possible henge
- Five cropmarks of possible Bronze Age barrows
- One spread of Romano-British finds indicative of settlement activity
- One PAS multi-period feature which may represent a Romano-British settlement
- Five former moats
- The site of former Little Bricett Church
- Forty farmsteads
- One tree-lined avenue.

11.5.44 In addition to the cropmark complexes identified by the Suffolk HER noted above, there are a further 42 low and negligible value non-designated cropmark complexes within the Order Limits of Section B that have been identified by the Project through the analysis of aerial images. These assets comprise former field boundaries and enclosures seen on 19th and 20th century OS maps. However, some unmapped features suggest phases of activity pre-dating the post medieval period. One medium value cropmark complex located outside the Order Limits is associated with Little Bricett Church, and its setting extends to the Order Limits, as shown on Figure 11.3:

Non-Designated Heritage Assets Assessed in the ES Chapter (Rev B) (document reference 6.11.F3).

11.5.45 There are 104 negligible and low value non-designated features within the Order Limits of Section B identified through a review of historic maps. The settings of these assets are not considered due to their values. These assets are illustrated on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3) and comprise:

- Fifty-six Hedgerows
- Eight parish boundaries
- Twenty-seven ponds
- Two lines for the Great Eastern Railway
- Two copses
- Two OS trigonometry points
- Two former quarries
- Five sites of historic buildings with one having an associated yard or gardens.

Historic Landscape Characterisation

11.5.46 The historic landscape of the Project has been considered using a holistic approach aligned with the ELC definition of landscape as '*an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*' (ELC, Chapter I, Article 1). This approach makes use of nationally recognised HLC data to identify HLTs within the Project and its surrounding areas which have been divided into individual HLUs across the Project. Using this approach, HLTs and HLUs intersecting with the Section B Order Limits in Suffolk have been organised thematically into the following historic landscape categories which are assessed:

- Pre-18th-century enclosure
- 18th-century and later enclosure
- Meadow or managed wetland
- Common pasture
- Post-1950 agricultural landscape
- Woodland.

Pre-18th-century enclosure

11.5.47 This landscape is of low value. Within Section B, this HLT is split into two sub-types: 'Pre-18th-century enclosure – random fields' and 'Pre-18th-century enclosure – irregular co-axial fields'.

- There are 23 units the 'random fields' sub-type that are distributed throughout Section B and intersecting with the Order Limits. These landscapes are made up of fields that have an irregular pattern (i.e. without any dominant axis). Many were in existence by the medieval period but could be earlier. Boundaries usually take the form of species-rich hedges (normally coppiced not laid) with associated ditches and banks

- There are 10 units of the ‘irregular co-axial fields’ sub-type that are distributed throughout Section B and intersecting with the Order Limits. The boundaries of the fields of these landscapes share a common axis. They share many of the characteristics of long co-axial fields but lack their overall regularity and their boundaries are often only approximately parallel. The systems vary in size, merge in and out of one another, and generally fail to follow one particular aspect or angle. In some cases, these systems represent the early, piecemeal, enclosure of common fields.

18th-century and later enclosure

- 11.5.48 This landscape is of low value. There is a single unit of the former ‘common pasture, built margin’ sub-type that intersects with the Order Limits to the south-east of Flowton. Pastures of this type were usually called greens but can also be termed commons. They are normally situated on poorly-drained clay plateaux and are medieval in origin. The greens were usually surrounded by substantial ditches, often water-filled and hedged on the outer margin, which frequently survive as substantial landscape features. Enclosure was often achieved through parliamentary acts and frequently involved the insertion of distinctive straight roads through the centres of the former greens.

Meadow or managed wetland

- 11.5.49 This landscape is of low value. There are nine units of the ‘meadow or managed wetland – meadow’ sub-type that intersect with the Order Limits distributed across Section B. This landscape is seasonally wet grassland that is mown for hay and/or grazed by animals. It is normally found alongside rivers and streams and characteristically takes the form of long and narrow land parcels that run parallel to the watercourses. They are often hedged on the dry-land side, but with ditched internal sub-divisions that often have a drainage function.

Common pasture

- 11.5.50 This landscape is of low value. There is a single unit of the ‘common pasture – open margin’ sub-type that intersects with the Order Limits immediately west of Barking Tye. These landscapes comprise areas of common pasture that were not a focus for settlement, and therefore, now and historically, had few or no houses on their margins. Common pastures of this type are frequently either heaths on impoverished sandy soils or wet riverine grasslands.

Post-1950 agricultural landscape

- 11.5.51 This landscape is of negligible value. Within Section B, this HLT is split into three sub-types: (Post-1950 agricultural landscape – boundary loss from random fields); (Post-1950 agricultural landscape – boundary loss from irregular co-axial fields); (Post-1950 agricultural landscape – woodland clearance).
- There are four units of the sub-type ‘boundary loss from random fields’ that intersect with the Order Limits distributed across Section B. These landscapes comprise areas of 20th-century boundary loss from fields formerly of the sub-type ‘random fields: landscapes made up of fields that have an irregular pattern’ (i.e. without any dominant axis). Many were in existence by the medieval period but could be earlier. Boundaries usually take the form of species-rich hedges (normally coppiced not laid) with associated ditches and banks

- There are 10 units of the sub-type 'landscape – boundary loss from irregular co-axial fields' that intersect with the Order Limits distributed across Section B. This landscape comprises areas of 20th-century boundary loss from fields formerly of the sub-type 'pre-18th-century enclosure – irregular co-axial fields' (landscapes where many of the boundaries share a common axis). They share many of the characteristics of long co-axial fields but lack their overall regularity and their boundaries are often only approximately parallel. The systems vary in size, merge in and out of one another, and generally fail to follow one particular aspect or angle. In some cases, these systems represent the early, piecemeal, enclosure of common fields
- There is a single unit of the sub-type 'woodland clearance' that are located west of Needham Market. This landscape comprises agricultural land created through woodland clearance in the post-war period. The former wood boundary may survive as a curving field boundary, but internal subdivisions usually have straight boundaries.

Woodland

- 11.5.52 Within Section B, this HLT is split into four sub-types: the low value sub-type 'woodland – ancient woodland'; the low value sub-type 'woodland – former medieval deer park'; the negligible value sub-type 'woodland – modern plantation on former arable'; and the low value sub-type 'woodland – modern plantation on former meadow'.
- There are six units of the sub-type 'ancient woodland' that intersect with the Order Limits distributed across Section B. According to the Nature Conservation Council survey of 1992 (Suffolk County Council Archaeological Services, 2012), ancient woodland sites are those which have had a continuous woodland cover since at least 1600 to the present day, and which have only been cleared for 'underwood' (coppice poles and/or firewood) and/or timber production. A wood present in 1600 was likely to have been in existence for centuries. This date was adopted as a threshold for two important reasons: firstly, it roughly marked the time when plantation forestry was widely adopted, and secondly, the period when detailed maps first start to appear. Ancient woods were frequently enclosed within wood banks and may contain internal sub-divisions
 - There is a single unit of the sub-type 'former medieval deer park' that is located north of Flowton. Deer parks were important symbols of lordship in the medieval period and normally consisted of areas of woodland, interspersed with more open areas of wood pasture and grassland glades, bounded by banks and ditches with hedging and/or wooden fences to form a 'park pale'. Some parks were in existence by 1086, but the majority appear to have been active in the period 1200-1400. Many had fallen into disuse by the 16th century, but some continued in existence as woodland
 - There is a single unit of sub-type 'modern plantation on former arable' that is located east of Battisford. This landscape comprises plantations, often coniferous, on land that can be shown, on map evidence, to have been farmland in the 19th or 20th century. The plantations usually form rectangular blocks or other regular linear or geometric shapes
 - There is a single unit of sub-type 'modern plantation on former meadow' that is located east of Finningham. This landscape comprises 20th century plantations on former meadows.

Protected Lanes

- 11.5.53 There are two low value non-designated protected lanes of possible medieval date recorded by Mid-Suffolk County Council within the Order Limits in Section B, therefore potentially impacted by the Project.

Geophysical Survey

Phase 1 Priority Geophysical Survey

- 11.5.54 Full details of the Phase 1 priority geophysical results, including a location figure, can be found in Appendix 11.4: Geophysical Survey (Priority Areas) Results Report (Rev B) (document reference 6.11.A4), a summary of which is provided below. Fourteen priority geophysical survey areas are located within Section B of the Project and are detailed below and shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.55 The first and northernmost priority geophysical survey area straddles the border between Norfolk (Section A) and Suffolk (Section B). The Section B portion of this priority geophysical survey area includes the pulling location of pylon RG89, one SuDS basin locations, one overhead line crossing protection works, overhead line mitigation works, bellmouth works, and the temporary haul road. The geophysical survey of this area has been completed revealing agricultural linear trends and magnetic disturbance within the former Palgrave Common (**2367**).
- 11.5.56 The second priority geophysical survey area, located on the northern side of Lion Road, is located over pylon RG93, a construction laydown area, a SuDS basin, overhead line mitigation works, overhead line crossing protection works, bellmouth works and the temporary haul road. The geophysical survey results of this area have revealed a former pond (**2606**) and two field boundaries (**2734**), but no anomalies of clear archaeological potential are identified.
- 11.5.57 The third priority geophysical survey area, known as Old Bury Road, near pylon RG96, Mid Suffolk (RG-Main), is located over the temporary construction compound (RG Main), the temporary haul road, bellmouth works, overhead line crossing protection works and two SuDS basin locations. The survey has revealed field boundary ditches (**2735**) and several linear/rectilinear anomalies but these are not of a clear archaeological nature.
- 11.5.58 The fourth priority geophysical survey area is located immediately south-west of pylon RG102 and incorporates part of the pulling location associated with pylon RG102, dismantling works for tower PKF24, a SuDS basin location, overhead line crossing protection works, bellmouth works, and the temporary haul road. The geophysical survey of this area has been completed revealing undated linear anomalies likely representing field boundaries (**2737**) and a possible enclosure that may be related to Neolithic (**2601**) or Iron Age settlement activity (**2068**) recorded in the area.
- 11.5.59 The fifth priority geophysical survey area, located to the north of Major Lane, includes pylon RG118, one SuDS basin, overhead line crossing protection works, bellmouth works, a highways laydown area, and the temporary haul road. The geophysical survey of this area has revealed linear and rectilinear anomalies, but no features of clear archaeological potential.

- 11.5.60 The sixth priority geophysical survey area includes pylons RG123 and RG124, three SuDS basin locations, bellmouth works, two construction laydown areas, the highways laydown area Wickham Road/Eastlands Lane Junction, near Finningham, Suffolk and the temporary haul road. The geophysical survey of this area has been partially completed, from the north of the survey area up to RG124, the survey area to the south-west of RG124 is yet to be surveyed. Of the area that has been surveyed, the features revealed have included field drains, field boundaries, possible field boundaries and an uncertain circular ring-shaped and uncertain linear shaped anomalies (**2742** and **2741**).
- 11.5.61 The seventh priority geophysical survey area, located to the north of Bells's Lane, includes pylon RG153, two SuDS basin locations, overhead line crossing protection works, bellmouth works, a construction laydown area and the temporary haul road. The geophysical survey of this area has not yet been undertaken.
- 11.5.62 The eighth priority geophysical survey area includes pylons RG154 to RG156, a pulling location associated with pylon RG155, three SuDS basin locations, temporary construction compound (RG-Sate2), and the temporary haul road. The geophysical survey of this area has been completed revealing undated linear anomalies likely representing field boundaries (**2782** and **2750**) and modern agricultural trends, but no anomalies of clear archaeological potential.
- 11.5.63 The ninth priority geophysical survey area is located between pylons RG162 and RG163, the pulling position associated with RG163, a SuDS basin location, overhead line crossing protection works, a construction laydown area, and the temporary haul road. The geophysical survey has been undertaken on the area but the results show a large area of green waste which has obscured any other results.
- 11.5.64 The tenth priority geophysical survey area includes pylon RG164, two SuDS basin location, overhead line mitigation works, and the temporary haul road. The geophysical survey of this area has been completed revealing a subcircular moat-like anomaly (**2249**). This enclosure has, possibly, opposing entrances on the eastern and western sides. Internal anomalies are limited to pit-like features of possible archaeological origin. A possible trackway is located at the eastern entrance. Close to the river are several natural or uncertain anomalies, these may relate to infilled river channels.
- 11.5.65 The eleventh priority geophysical survey area includes pylons RG167-RG169, pulling location for pylon RG168, towers to dismantle PZB82-PZB79, three SuDS basins, bellmouth works, overhead line crossing protection works, a construction laydown area, overhead line mitigation works and the temporary haul road. The geophysical survey of this area has been partially completed and the surveyed area around RG169 to PZB79, has not revealed any clear evidence of archaeological potential within the survey area.
- 11.5.66 The twelfth priority geophysical survey area includes pylons RG181-RG183, a pulling location associated with pylon RG182, three SuDS basin locations, overhead line crossing protection works, overhead line mitigation works, and the temporary haul road. The geophysical survey of this area has been completed revealing a field boundary and perpendicular linear anomalies likely representing field boundaries and a possible enclosure (**2765** and **2766**).
- 11.5.67 The thirteenth priority geophysical survey area, is centred around the temporary construction compound (RG-SC02), and is located east of Bramford Substation and includes (RG-SC02), a SuDS basin location, cable undergrounding works, utility connection works (should it be needed), bellmouth works, a construction laydown

area, a temporary attenuation drainage pond, and the temporary haul road. The geophysical survey of this area has been completed revealing three separate sub-rectangular enclosures, **(2280)**, **(2409)**, and **(2508)** – from east to west, with internal divisions and discrete features, as well as infilled ponds and several linear anomalies likely representing field boundaries **(2754)** identified on 19th century OS mapping.

- 11.5.68 The fourteenth priority geophysical survey area is large and includes pylons JC3-JC10, pulling locations associated with pylons JC4 and JC7, the dismantling of towers PHB28-PHB31 and towers PLD44-PLD49, temporary tower works, cable undergrounding works, seven SuDS basin locations, overhead line mitigation works, a cable sealing end platform, two 132 kV overhead line mitigation works compounds PHB/PLD, south-east of Bramford Substation (PHB-C2) and PLD48, west of Loraine Way (PLD-C1), temporary and permanent attenuation drainage works, and the temporary haul road. The geophysical survey of this area has been completed revealing linear anomalies likely representing field drains, field boundaries, agricultural trends, and three concentrations of anomalies likely representative of trackways and settlement enclosures **(2767, 2768, 2727 and 2726)**.

Phase 2 Geophysical Survey

- 11.5.69 Full details of the results, including a location figure, are provided in Appendix 11.8: Geophysical Survey (Phase 2) Report (document reference 6.11.A8). A summary of the results is provided in this section, and the progress of the geophysical survey is shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.70 The Phase 2 geophysical survey in Section B was focused on the temporary haul road, 132kV underground cable, the pylon working areas and the SuDS basin locations in the District of Mid Suffolk between pylon RG89 at the Norfolk/Suffolk border in the north to pylon JC35 in the Little Wenham Cable Sealing End Compound in the south. There are some gaps in the data due to: archaeological work (geophysical survey and trial trenching) unrelated to the Project already undertaken (RG202, RG207 – RG208); no haul road (RG93, RG161 – RG162, RG165 – 166, JC16 – JC17), refused access/unsuitable ground conditions (RG136 and haul road, RG139 – RG140, RG144 – RG145, RG174 – RG175, 132kV underground cable replacing EEPK10 – EEPK14, RG179 and haul road, 132kV underground cable replacing PHB26 – PHB21, JC19 – JC20).
- 11.5.71 The Phase 2 geophysical survey of Section B is complete with the exception of the gaps in the collected data noted above. The survey has confirmed and/or expanded known cropmark sites mapped by the Project **(2780, 2735, 2737, 2738, 2739, 2740, 2742, 2743, 2744, 2745, 2746, 2748, 2749, 2747, 2750, 2773, 2775, 2760, 2764, 2765, 2751, 2757, 2759, 2753, 2752)** and the HER **(2249, 2722)**, adding and confirming predominantly field boundaries across these assets. Across the survey area anomalies indicative of field drains, ploughing, former ponds, magnetic disturbance, and natural variations were also identified. The survey also identified anomalies of ‘archaeological’, ‘possible archaeological’ and ‘uncertain’ origin and where these features fall outside known assets or where they are incongruous with the nature of the asset they fall within, they have been identified as new assets. The new assets identified by the Phase 2 geophysical survey comprise:
- Asset **(2585)** comprises a small group of ‘archaeological’ and ‘possible archaeological’ undated linear anomalies forming three sides of a rectilinear enclosure with numerous internal and external discrete and linear anomalies

located at and adjacent to pylon RG117. This asset is of low value based on its evidential value.

- Asset **(2586)** comprises a small group of ‘possible archaeology’ and ‘uncertain origin’ linear anomalies forming small irregular enclosures on the southern flank of Holly Road, possibly representing roadside settlement adjoined to RG187. This asset is of low value based on its evidential value.
- Asset **(2587)** comprises undated ‘uncertain origin’ anomalies forming possible conjoined enclosures/fields, located within the temporary haul road adjacent to Pylon RG90. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
- Asset **(2588)** comprises undated ‘uncertain origin’ anomalies forming possible enclosure(s), located within the 132kV underground cable works area west of pylon RG95. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
- Asset **(2589)** comprises ‘uncertain origin’ anomalies forming a short linear and a possible small ring ditch (c. 11m) with a central pit, located within the 132kV underground cable works area south of pylon RG98. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
- Asset **(2590)** comprises undated ‘archaeological’ and ‘possible archaeological’ anomalies forming linear features and a possible enclosure, located partially within the temporary haul road, south-west of pylon RG102. Nearby findspots recorded by the Suffolk HER (2027) suggest a possible prehistoric date for the enclosure. This asset is of low value based on its evidential value
- Asset **(2591)** comprises undated ‘uncertain origin’ anomalies forming possible enclosure and discrete features, located within the temporary haul road and pylon RG113. This asset is of low value based on its evidential value
- Asset **(2592)** comprises undated ‘uncertain origin’ anomalies forming a possible enclosure and a circular setting of discrete features, located within the temporary haul road, pylon RG118 and a laydown area. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
- Asset **(2593)** comprises undated ‘uncertain origin’ anomalies forming possible enclosures and a complete ring ditch with a central pit, located largely outside the temporary haul road south of pylon RG123. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
- Asset **(2594)** comprises undated ‘uncertain origin’ anomalies forming linear features and a large discrete feature, located within the temporary haul road and SuDS basin north-west of pylon RG146. This asset is of low value based on its evidential value
- Asset **(2595)** comprises undated ‘uncertain origin’ anomalies forming short linear and discrete features, located partially within the temporary haul road immediately south of pylon RG147. This asset is of low value based on its evidential value
- Asset **(2596)** comprises undated ‘uncertain origin’ anomalies forming short linear and several discrete features, located within the working area for pylon RG149. This asset is of low value based on its evidential value

- Asset (2597) comprises undated 'possible archaeology' anomalies forming conjoined fields and possible trackways, located partially within the temporary haul road and pylons RG182 and RG183. This asset is of low value based on its evidential value
- Asset (2598) comprises undated uncertain origin' anomalies forming the south-west corner of a possible enclosure, located within the temporary haul road north-north-east of pylon RG186. This asset is of low value based on its evidential value
- Asset (2599) comprises undated 'archaeological' and 'possible archaeological' anomalies forming conjoined enclosures and discrete features suggesting possible occupation, located within the temporary haul road and pylon RG194. This asset is of medium value based on its evidential value
- Asset (2613) comprises an undated 'uncertain origin' anomaly forming a large discrete feature, located within the 132kV underground cable work area east-north-east of pylon RG200. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
- Asset (2614) comprises undated anomalies forming a partial possible enclosure with a western entrance, located within the working area for pylon RG204. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
- Asset (2615) comprises undated 'archaeological' and possible archaeological' anomalies forming a small partial enclosure and discrete features, located within the 132kV underground cable works area c. 880 m east of Bramford Substation. This asset is of low value based on its evidential value
- Asset (2616) comprises undated 'uncertain origin' anomalies forming a small curvi-linear enclosure, located within the temporary haul road immediately north of pylon RG193. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
- Asset (2718) comprises undated 'uncertain origin' anomalies forming possible field boundaries and a trackway, located within the temporary haul road and SuDS basin south of pylon RG157. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value.

Archaeological Trial Trench Survey

- 11.5.72 There are three priority archaeological trial trenching areas located within Section B. The northernmost trenching area is focused on the southern side of Old Bury Road, A143 and is north-west of pylon RG96, incorporating those elements of the Project identified relating to the third priority geophysical survey area which includes the temporary construction compound (RG-Main), as noted above. The archaeological contractor has completed the archaeological evaluation, recording the works as Site 5 – Area 12 (see below).
- 11.5.73 The second trenching area is located west of Broad Green and incorporates pylons RG155 and RG156, as well as those elements of the Project identified relating to the eighth priority geophysical survey area noted above. The archaeological contractor has completed the archaeological evaluation, recording the works as Site 6 – Area 13 (see below).

- 11.5.74 The third trenching area is located east of Bramford Substation south of Bullen Lane and incorporates the temporary construction compound (RG-SC02), as well as those elements of the Project identified relating to the thirteenth priority geophysical survey area noted above. The archaeological contractor has completed the archaeological evaluation, recording the works as Site 7 – Area 14 (see below).
- 11.5.75 Further detail is included in Table 11.2 in relation to further environmental information to be provided.

Area 12

- 11.5.76 Area 12 is located immediately south of the A143 Old Bury Road, to the east of Wortham and immediately south of pylon RG95. The area encompasses the RG-Main main compound, two SuDS basin locations, and the temporary haul road. Fifty trenches were excavated in Area 12 with archaeological features identified in 19 of them, comprising four discrete features and 30 linear features. The identified archaeological remains dated to the Romano-British and post medieval periods with some scattered undated features also identified. The Romano-British remains comprise a possible agricultural/pastoral enclosure (**2584**) in the north-east of the area, which corresponds with an L-shaped geophysics anomaly. The enclosure is of low value base on its evidential and historical values. The archaeological contractor suggests the undated features identified in this area may also be of Romano-British date. The post medieval archaeological remains comprise field boundaries identified as cropmarks (**2735**) by the Project and confirmed and expanded on by the geophysical survey.

Area 13

- 11.5.77 Area 13 is located south of the A1120 Bell's Road and between Broad Green and Creeping Lane. The area encompasses pylons RG155 and RG156, part of the pulling location associated with pylon RG155, a satellite compound (RG-Sate2), and the temporary haul road. Thirty-six trenches were excavated with archaeological features and deposits noted within four of them, comprising three linear and one discrete cut features. The identified archaeological remains within Area 13 are of post medieval date. The archaeological remains consisted of two boundary ditches and a firepit, with small finds comprising tile, and metal plough blade fragments appearing to be of a post medieval or modern date. The boundary ditches were identified on first edition OS maps, and one was identified by the Project as a cropmark (**2750**). They had V-shaped profiles and were deliberately backfilled, with the plough blade found within. The firepit was likely contemporary to the ditches and contained heat-affected material, tile and charcoal, which was taken as an environmental sample alongside a charcoal concentration from one ditch.

Area 14

- 11.5.78 Area 14 is located to the east and south of Bullen Lane and east of Bramford Substation. The Area encompasses a substation compound (RG-SC02) a SuDS basin location, utility connection works (should it be needed), bellmouth works, a construction laydown area, a temporary attenuation drainage pond, and the temporary haul road. Forty-eight trenches were excavated targeting the remains of three small enclosures with sub-divisions and internal discrete features (**2280**, **2409**, and **2508**) identified by the geophysical survey, and Project identified linear cropmarks as well as blank areas. Archaeological features and deposits were

identified within 24 of the trenches, comprising 16 discrete and 31 linear cut features, as well as one spread. The identified archaeological remains within Area 14 are largely of medieval or post medieval/modern date, with some undated features. A late Bronze Age pit (**2582**) and an early Iron Age pit (**2583**) were also identified. These pits are of low value based on their evidential and historical values. The three small medieval enclosure complexes produced a finds assemblage comprising animal bone, ceramic building material, fired clay, and medieval pottery. The three enclosures (**2280**, **2409** and **2508**) are of medium value based on their evidential and historical values. The trenching also identified a large waste pit within the eastern enclosure (**2508**). Romano-British activity is concentrated in the north of the Area and is likely related to the topography, which slopes in the south but is flatter to the north. The post-medieval and modern era is represented by three parallel north-west/south-east field boundaries previously identified as cropmarks by the Project (**2754**) and apparent on 19th century OS mapping. Small finds from the field boundaries included clay pipe stems, post medieval glass and modern plastic. The eastern ditch did not contain dating material and is not seen on OS maps but has the same alignment, suggesting it was part of the same field system.

Geoarchaeological and Palaeoenvironmental Assessment

- 11.5.79 A programme of geoarchaeological monitoring of geotechnical investigation groundworks was undertaken to determine the potential for deposits of geoarchaeological and palaeoenvironmental significance that may be impacted by the Project. A total of 15 geoarchaeological interventions were monitored to produce deposit models across arable and pastoral fields within the Waveney Valley, detailed in Appendix 11.6: Geoarchaeological and Archaeological Monitoring of Ground Investigation Works Report (document reference 6.11.A6). These deposit models cover an area across Sections A and B straddling the border between Norfolk and Suffolk on the banks of the River Waveney.
- 11.5.80 The modelling revealed that the chalk bedrock was overlain by a complex sequence of superficial geological deposits relating to past fluvial, glacial and lacustrine environments, that were commonly capped by combinations of made ground, topsoil, Alluvium and River Terrace Deposits.
- 11.5.81 The earliest deposits overlying the bedrock are unlikely to contain archaeological material having been formed prior to c.700,000 BP. However, following that, further cycles of glacial and interglacial periods deposited fluvial deposits and tills across the landscape. Till was recorded across the valley in all but two boreholes. This was followed by fluvial sediments generated by glaciofluvial meltwater and then finer-grained sediments that suggest that formation of a lake. These finer-grained sediments are possibly organic and have the potential to contain palaeoenvironmental information.
- 11.5.82 This was then followed by a further phase of more coarse material associated with a phase of glaciation. Later accumulations of coarse material with no Alluvium suggest a rapidly mobile channel system within the valley floor. Later Alluvium and peat forming on the river terraces are indicative of warmer water-logged environments most likely formed during the Holocene period. Both deposits have the potential to preserve organic material well and may provide good evidence for the human environment.
- 11.5.83 Deposits of palaeoenvironmental and geoarchaeological interest identified across the valley include Alluvium, peat, lodge farm clay and silt deposits as well as possible interglacial lacustrine deposits. Tufa deposits were also locally present within

uppermost alluvial layers, which often contain fossils and other evidence of past environmental conditions.

- 11.5.84 In addition to the geoarchaeological monitoring, an archaeological watching brief was maintained during GI works in order to mitigate for impacts to potential archaeology in areas identified as having medium archaeological potential. Within Section B this included the monitoring of three trial pits and one infiltration pit. The monitoring recorded no archaeological finds or features.

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

Summary of Desk-Based Assessment

- 11.5.85 Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) provides a detailed overview of the heritage assets within the defined Study Areas for Section C and a discussion of the prehistoric and historical development of the landscape within this section of the Project.

Designated Heritage Assets

- 11.5.86 There are no World Heritage Sites and no registered battlefields within the Study Area in Section C. Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) has identified 10 scheduled monuments, 329 listed buildings, one registered park and garden, and nine conservation areas within the Study Area in Section C. The Historic Environment Baseline Report has established that there would be no impact on the majority of these assets as their settings do not extend to the Order Limits, with the exception of the following, which are shown on Figure 11.2: Designated Heritage Assets Assessed in the ES Chapter (Rev B) (document reference 6.11.F2):

- Three high value scheduled monuments:
 - ‘Crop mark site S of Ardleigh’ (**1002146**)
 - ‘Henge, round barrow cemeteries and enclosure cropmarks 510 m south-west of St Mary’s Church’ (**1489898**)
 - Wenham Castle (Little Wenham Hall) (**1003759**)
- Three high value Grade I listed buildings:
 - ‘Church of St Mary’, Burstall (**1036948**)
 - ‘Church of St Mary’, Langham (**1223452**)
 - ‘Little Wenham Castle’ (**1033405**)
- Eight high value Grade II* listed buildings:
 - ‘Lowe Hill House’ (**1036991**)
 - ‘Church of St Mary’, Ardleigh (**1112060**)
 - ‘Church of St Mary’, Copdock and Washbrook (**1194408**)
 - ‘Church of St Mary’, Holton St. Mary (**1351596**)
 - ‘Church of All Saints’ (**1351620**)

- ‘Church of St Mary’, Higham (**1351625**)
- ‘Church of St Mary’, Little Bromley (**1337175**)
- ‘The Hall’ (**1223465**)
- Fifty-five medium value Grade II listed buildings
 - See Historic Environment Baseline Report (document reference 6.11.A1) for details
- Two medium value conservation areas
 - ‘Ardleigh Conservation Area’ (**CA26**)
 - ‘Stratford St Mary Conservation Area’ (**CA41**).

Non-Designated Heritage Assets

- 11.5.87 Details of high, medium, low and negligible value non-designated assets within the Order Limits in Section C are detailed within this section. In addition, details of non-designated assets of high/medium value within the Study Area whose settings extend to the Order Limits are also provided. These assets are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3). Details of negligible/low value non-designated assets located outside the Order Limits but within the Study Area are reported in the Historic Environment Baseline Report (document reference 6.11.A1).
- 11.5.88 There are 72 high to negligible value non-designated heritage assets of prehistoric through to modern date recorded in the Suffolk, Essex and Colchester HERs within the Order Limits of Section C and, therefore, potentially impacted by the Project.
- 11.5.89 There are four high value non-designated assets within the Study Area where their settings extend to the Order Limits.
- 11.5.90 There are 10 medium value non-designated assets within the Study Area where their settings extend to the Order Limits.
- 11.5.91 The 72 high to negligible value non-designated assets within the Order Limits and potentially impacted by the Project are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:
- Two sites with records for excavated archaeological remains indicative of late Iron Age and late Iron Age/Romano-British settlement activity
 - Four Roman roads
 - One post medieval farmstead
 - A post medieval field barn
 - A post medieval bridge
 - Four sites with excavated archaeological remains indicative of medieval/post medieval agricultural practice
 - Two canals
 - Three sites of a PAS find

- Twelve findspots
 - One site of the former Dedham Heath
 - One former milestone
 - One railway
 - One WWII airfield
 - Eighteen cropmark complexes suggestive of agricultural activity
 - Fifteen cropmark complexes suggestive of enclosure and/or settlement activity
 - One cropmark complex suggestive of settlement and funerary activity
 - Four cropmark complexes suggestive of funerary activity.
- 11.5.92 The four high value non-designated assets within the Study Area where their settings extend to the Order Limits, are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:
- Four HER records belonging to a high value extensive cropmark complex of probable later prehistoric to Romano-British date comprising ring ditches, rectilinear enclosures and other linear boundaries that likely represent funerary, settlement and agricultural activity.
- 11.5.93 The 10 medium value non-designated assets where their settings extend to the Order Limits are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:
- One cropmark complex suggestive of enclosure and/or settlement activity
 - Two cropmark complexes suggestive of funerary activity
 - Two medieval moats
 - Five post medieval farmsteads.
- 11.5.94 In addition to the cropmark complexes identified by the Suffolk, Essex and Colchester HERs noted above, there are a further 20 non-designated low to negligible value cropmark complexes within the Order Limits of Section C that have been identified by the Project through the analysis of aerial images. These assets largely comprise former field boundaries and enclosures seen on 19th and 20th century OS mapping, although unmapped features suggest earlier phases of activity, as shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3).
- 11.5.95 There are 44 negligible or low value non-designated features within the Order Limits of Section C identified through a review of historic maps carried out by the Project. The setting of these assets is not considered due to their values. These assets are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3)
- Four buildings/structures
 - Two gravel pits
 - Eleven hedgerows

- Thirteen parish boundaries
- One orchard
- Nine ponds
- A group of ponds
- One railway
- One OS trigonometry point
- One woodland.

Historic Landscape Characterisation

11.5.96 The historic landscape of the Project has been considered using a holistic approach aligned with the ELC definition of landscape as ‘*an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*’ (ELC, Chapter I, Article 1). This approach makes use of nationally recognised HLC data to identify HLTs within the Project and its surrounding areas which have been divided into individual HLUs across the Project. Using this approach, HLTs and HLUs within the Section C Order Limits in Suffolk and Essex have been organised thematically into the following historic landscape categories which are assessed:

- Farming (enclosed land)
- Enclosed meadow
- Horticulture
- Land Use – water-based
- Woodland
- Post medieval military.

Suffolk – Farming (enclosed land)

11.5.97 Pre-18th-century enclosure. This landscape is of low value. Within Section C, this HLC is split into three sub-types: ‘pre-18th-century enclosure – random fields’, ‘pre-18th-century enclosure – rectilinear fields’, and ‘pre-18th-century enclosure – irregular co-axial fields’:

- There are 11 units of the sub-type ‘random fields’ that are distributed throughout Section C, that intersect with the Order Limits. These landscapes are made up of fields that have an irregular pattern (i.e. without any dominant axis). Many were in existence by the medieval period but could be earlier. Boundaries usually take the form of species-rich hedges (normally coppiced not laid) with associated ditches and banks
- There is a single unit of the sub-type ‘pre-18th-century enclosure – rectilinear fields’ that intersects with the Order Limits in Section C. This is not a dominant type in Suffolk. Landscapes of this type are made up of fields that tend to be small and rectilinear in shape, forming patterns that resemble the brickwork in a wall. They tend to exist in isolated pockets within more extensive areas of other types of early enclosure and probably indicate relatively late episodes of field creation or reorganisation, although still pre-18th century, within earlier surroundings

- There are seven units of the sub-type 'irregular co-axial fields' that are distributed throughout Section C, that intersect with the Order Limits. The boundaries of the fields of these landscapes share a common axis. They share many of the characteristics of long co-axial fields but lack their overall regularity and their boundaries are often only approximately parallel. The systems vary in size, merge in and out of one another, and generally fail to follow one particular aspect or angle. In some cases, these systems represent the early, piecemeal, enclosure of common fields
- There is a single unit of the sub-type 'former common arable or heathland'. Fields formed from land that was previously farmed as individually owned strips in large common or 'open' fields. Field shapes are frequently rectangular with straight boundaries, as a result of having been laid out to measured plans by surveyors. The dividing line between heathland and common fields can be difficult to distinguish, hence the inclusion of heathland in the title of this sub-type.

11.5.98 Post-1950 agricultural landscape. This landscape is of negligible value. Within Section C, this HLT is split into four sub-types: 'post-1950 agricultural landscape – boundary loss from random fields'; 'post-1950 agricultural landscape– boundary loss from long co-axial fields'; 'post-1950 agricultural landscape – boundary loss from irregular co-axial fields'; 'post-1950 agricultural landscape – arable on former meadow':

- There is one unit of the sub-type 'boundary loss from random fields' that intersects with the Order Limits in Section C. This landscape comprises areas of 20th-century boundary loss from fields formerly of the sub-type 'random fields: landscapes made up of fields that have an irregular pattern' (i.e. without any dominant axis). Many were in existence by the medieval period but could be earlier. Boundaries usually take the form of species-rich hedges (normally coppiced not laid) with associated ditches and banks
- There is one unit of the sub-type 'boundary loss from long co-axial fields' that intersects with the Order Limits in Section C. This landscape comprises 20th-century boundary loss from fields formerly of the sub-type 'pre-18th-century enclosure – long co-axial fields'. Landscapes made up of fields where a high proportion of the boundaries share a dominant axis. This takes the form of long, slightly sinuous lines that run roughly parallel to each other for considerable distances. These lines usually run at right angles to a significant watercourse. Co-axial systems are not all of the same date – some in valley-side positions may represent very early farming boundaries, but others on the clay plateaux are likely to be medieval in date
- There are two units of the sub-type 'boundary loss from irregular co-axial fields) that intersect with the Order Limits in Section C. These landscapes comprise areas of 20th-century boundary loss from fields formerly of the sub-type 'pre-18th-century enclosure – irregular co-axial fields: landscapes where many of the boundaries share a common axis'. They share many of the characteristics of long co-axial fields but lack their overall regularity and their boundaries are often only approximately parallel. The systems vary in size, merge in and out of one another, and generally fail to follow one particular aspect or angle. In some cases, these systems represent the early, piecemeal, enclosure of common fields
- There is a single unit of the sub-type 'arable on former meadow' that intersects with the Order Limits in Section C. This landscape comprises 20th-century conversion of meadowland to arable. Normally found alongside rivers and streams and characteristically takes the form of long and narrow land parcels that

run parallel to the watercourses. Often hedged on the dry-land side, but with ditched internal sub-divisions that often have a drainage function.

Suffolk – Meadow or managed wetland

- 11.5.99 This landscape is of low value. There are five units of the sub-type ‘meadow or managed wetland – meadow’ that intersect with the Order Limits distributed across Section C. This landscape is seasonally wet grassland that is mown for hay and/or grazed by animals. It is normally found alongside rivers and streams and characteristically takes the form of long and narrow land parcels that run parallel to the watercourses. They are often hedged on the dry-land side, but with ditched internal sub-divisions that often have a drainage function.

Suffolk – Woodland

- 11.5.100 This landscape is of low value. There is a single unit of the sub-type ‘ancient woodland’ that intersects with the Order Limits in Section C. According to the Nature Conservation Council survey of 1992, ancient woodland sites are those which have had a continuous woodland cover since at least 1600 to the present day and which have only been cleared for ‘underwood’ (coppice poles and/or firewood) and/or timber production. A wood present in 1600 was likely to have been in existence for centuries. This date was adopted as a threshold for two important reasons: firstly, it roughly marked the time when plantation forestry was widely adopted, and secondly, the period when detailed maps first start to appear. Ancient woods were frequently enclosed within wood banks and may contain internal sub-divisions.

Suffolk – Post medieval military

- 11.5.101 This landscape is of low value. There is a single unit of the sub-type ‘post medieval military – disused military’ that intersects with the Order Limits in Section C. This HLC type comprises land formerly used for military establishments.

Essex – Farming (enclosed land)

- 11.5.102 Farming of the land has been a continuous means of managing the landscape for centuries. Although evidence as early as the Mesolithic is present within the Study Area for human interaction with the landscape, an understanding of farming is present from the medieval period onwards. Character types within farming are influenced by field patterns and five identifiable types are identified in Section C:
- Pre-18th Century ‘Irregular’ Enclosure: These low value landscapes comprise irregular enclosures that vary considerably in size and shape, forming both arable and pasture, and are widespread though more common to the north and west of the county. They are probably the result of piecemeal enclosure and may originate from the medieval period or earlier. Morphologically they tend to have sinuous edges and offset corners. There are five units of this HLC type that intersect with the Order Limits in the Essex portion of Section C of the Project; two are located east of Langham Wick, with the remaining three to the west, south, and south-east of Little Bromley.
 - Piecemeal enclosure by agreement: These low value landscapes were created, by informal agreement, to subdivide a pre-existing earlier field system. They are characterised by straighter boundaries. Dating of origin is difficult but they usually predate the introduction of the later formal Parliamentary Enclosure Acts and thus may relate in certain parishes to the earlier acts of enclosure. There are seven

units of this HLC type that intersect with the Order Limits and that are distributed across the Essex part of Section C of the Project.

- Formal style Parliamentary Enclosure: These medium value landscapes comprise a rigorous rectilinear field system that has overwritten any prior landscape enclosure pattern, usually either prior common arable field, or former heathlands, or wastes. They are associated with the later Parliamentary Enclosure Acts. There is a single unit of this HLC type that intersects with the Essex portion of the Order Limits in Section C located east of Langham Wick.
- 20th century enclosure: These negligible value landscapes comprise modern, small field enclosures, which can be either nested within a pre-existing field system or be a totally new field system that has overwritten the prior landscape. These occur either at random across the landscape or may be focused on the fringes of urban settlement, being part of the peri-urban fringe; or along new infrastructure such as motorways. They are usually identified as having straight edges or are rectilinear fields where corners meet and occur only on the more recent maps. There are 25 units of this HLC type that intersect with the Essex portion of the Order Limits and that are distributed across Section C of the Project.
- Boundary loss: These low value landscapes represent field boundary loss since the 1950s due to mechanisation and changes in agricultural practices. This may range from the loss of a single boundary merging two fields into one, or many field boundaries being removed to form a single field. The resultant field is a hybrid and palimpsest, with edges that may have several periods of origin. The surviving edges of these fields are of historic importance. There are 51 units of this HLC type that intersect with the Essex portion of the Order Limits and that are distributed across Section C of the Project.

Essex – Enclosed meadow

11.5.103 Enclosed meadows in Section C are represented by the following HLC type:

- Enclosed meadow: These low value landscapes comprise sinuous fields that border rivers, often forming part of the floodplain/regime of the river, where the river floods naturally. They may be marked as areas of rough pasture. The traditional use from medieval times up to the 1950s was to produce a hay crop for winter fodder and for grazing. Some have been subsequently wooded or alternate with wooded areas along the river's course. There are two units of this HLC type that intersect with the Essex portion of the Order Limits within Section C located south of Stratford St Mary and east of Hornestreet.

Essex – Horticulture

11.5.104 Horticultural practice in Section C is represented by the following two HLC types:

- Allotments: This negligible value HLC type covers parcels of land rented or leased to individuals to grow vegetable and soft fruit crops. This is a land use type and may fill or be part of an earlier enclosure type. They are usually located within or around the fringes of built-up areas. Allotments as known today originated in the mid-19th century, peaked in the mid-20th century but then steadily declined. There is a single unit of this HLC type that intersects with the Essex portion of the Order Limits in Section C located south-east of the Foxash Estate.

- Orchard: This negligible value HLC type covers orchards, either large commercial concerns, or small orchards attached to larger homes or estates. Private orchards may occupy a field where the edge remains consistent through time but use within can vary between being used as orchard or cleared as a paddock. The earlier commercial orchards are defined by the pre-existing field systems in which they are planted. Later commercial orchards often remove prior boundaries and redefine field edges with new boundaries. Commercial orchards date from the late 19th century onwards but may be planted within earlier pre-existing field boundaries. Private orchards may predate the earliest map sources. There are four units of this HLC type that intersect with the Essex portion of the Order Limits within Section C located around Ardleigh.

Essex – Land use – water-based

- 11.5.105 Water-based land use in Section C is represented by the following HLC type: Reservoir: This negligible value HLC type covers a wide range of water bodies, including public water supply reservoirs, flooded mineral extraction pits, and farm reservoirs and ponds for irrigation and livestock use. Most were created in the 20th century but farm ponds may go back, predating the earliest map sources. There are four units of this HLC type that intersect with the Essex portion of the Order Limits within Section C, located east, west, and north of Ardleigh and north of Langham.

Essex – Woodland

- 11.5.106 Woodland in Section C is represented by the following HLC type:
- 18th – 20th Century Woodland Plantation: This includes all managed and planted woodland which post-dates ancient woodland. These may be planted as commercial concerns or as ornamental woodland in association with informal parkland. There are four units of this HLC type that intersect with the Essex portion of the Order Limits within Section C; three located north of Langham and one to the south-east of Langham.

Protected Lanes

- 11.5.107 There are two low value non-designated protected lanes of medieval date recorded by Colchester City Council within the Order Limits in Section C and one within the district of Tendring, therefore potentially impacted by the Project.

Geophysical Survey

Phase 1 Priority Geophysical Survey

- 11.5.108 Full details of the Phase 1 priority geophysical results, including a location figure, can be found in Appendix 11.4: Geophysical Survey (Priority Areas) Results Report (Rev B) (document reference 6.11.A4), a summary of which is provided below. Seven priority geophysical survey areas are located within Section C of the Project, and are detailed below and shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.109 The first and northernmost priority geophysical survey area covers the route of the Project between the Wenham Grove CSE compound in the north to the Stour river valley in the south. This section of the Project is over 7 km in length and includes pylons JC34, JC35 cable undergrounding works, the haul road, temporary

construction compounds (JC-SC01, JC-CC02 and JC-BC01), bellmouth works, trenchless crossings a permanent spoil bund, temporary infiltration drainage area, and several attenuation and infiltration drainage work locations, both permanent and temporary. The geophysical survey of this area has produced geophysical anomalies representing former field boundaries, field drains, and ploughing have been identified across much of the surveyed area (**3168, 3335, 3336, 3337, 3338, 3351, and 3339**) and linear anomalies likely associated with the former Raydon airfield (**3189**). Within the southern tip of Raydon airfield and immediately west of Acacia Road, the survey identified anomalies representative of a possible trackway and associated enclosures with internal features (**3281**). The survey also identified a small sub-square enclosure with three sides of a smaller square enclosure within, as well as several discrete pit-like features (**3337**). This asset is located between the B1070 to the north-east and Raydon Road to the south-west. It has now been archaeologically trenched, and a summary of the results is reported below. The geophysical survey of the Order Limits to the north of the River Stour in the area of high value cropmarks, confirmed the subsurface survival of some of these features including rectilinear enclosures, a partial curvilinear enclosure and semi-circular enclosure (**3177, 3176, 3178 and 3188**).

- 11.5.110 The second priority geophysical survey area covers the Project alignment between the Stour river valley in the north to the new EACN Substation to the east of Ardleigh in the south. This section of the Project is over 10 km in length and includes cable undergrounding works, pylons TB4 to TB12, pulling locations associated with pylons TB4- TB12, two primary (cable) and temporary construction compounds (JC-CC03, JC-CC04 and JC-CC05 and JC-BC02). There are also six SuDS basin locations, two temporary construction compounds, nine overhead line crossing protection work areas, overhead line mitigation works, bellmouth works, several attenuation and infiltration drainage work locations both permanent and temporary, trenchless crossings, and the temporary haul road. One small section of the geophysical survey in the north of this area remains to be completed at the time of writing, but thus far geophysical anomalies have revealed comprising: former field boundaries/enclosures and ring ditches, a trackway and rectangular field boundaries, with the features closest to the river Stour indicating a possible settlement (**3239, 3216 and 3237**). A circular enclosure, trackway and possible ditch type anomaly at Glebe Farm (**3045**). Linear features, probable enclosures and trackways (**3049**). Field boundaries (**3034 and 3362**) curvilinear ditches (**3218**) and features that are archaeological or possible archaeological and uncertain in origin including ditches and linear features.
- 11.5.111 The third priority geophysical survey area is located in the area of the new EACN Substation. This survey area includes the new EACN Substation, temporary construction compounds (JC-SC06, JC-SC07 and JC-BC03), a permanent spoil bund, pylon TB1 to TB3, DNO substation, highway mitigation at Ardleigh Road/Little Bromley Road/Grange Road Junction, near Little Bromley, Essex, cable undergrounding works, one permanent and one temporary attenuation drainage pond, and three attenuation and infiltration drainage work locations. The geophysical survey of this area has revealed geophysical anomalies representing former field boundaries and agriculture anomalies (**3232**). Linear and curvilinear anomalies of possible archaeological origin were identified in the north-east of the survey area, likely representing field boundaries, possible enclosure, possible trackways and a Roman road (PRN 2631) (**3039**).
- 11.5.112 The fourth priority geophysical survey area is centred around a highways laydown area at Bentley Road/Church Road Junction, near Little Bromley, Essex, a

permanent infiltration drainage pond and bellmouth. The geophysical survey of this area has completed revealing only geophysical anomalies of natural origin.

- 11.5.113 The fifth priority geophysical survey area is centred around the highway mitigation construction compound at Bentley Road/A120 Junction, near Little Bentley, Essex. The geophysical survey of this area has not yet been undertaken.
- 11.5.114 The sixth priority geophysical survey area is located east and west of Dead Lane to the west of Ardleigh and includes pylons TB13 to TB17, pulling locations associated with pylons TB15 and TB17, three SuDS basin locations, a highways laydown area, bellmouth works, two overhead line crossing protection works, the highway mitigation construction compound Wick Lane, near Ardleigh, Essex, overhead line mitigation works, and the temporary haul road. The geophysical survey of this area has revealed geophysical anomalies representing former field boundaries, and possible enclosures (**3223**).
- 11.5.115 The seventh priority geophysical survey area includes TB19, bellmouth works, overhead line mitigation works, one SuDS basin, construction laydown area and the temporary haul road. The geophysical survey of this area has not yet been undertaken.

Phase 2 Geophysical Survey

- 11.5.116 Full details of the Phase 2 geophysical survey and results, including a location figure, are provided in Appendix 11.8: Geophysical Survey (Phase 2) Report (document reference 6.11.A8). A summary of the results is provided in this section, and the progress of the geophysical survey is shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.117 The Phase 2 geophysical survey in Section C was focused on the temporary haul road, the pylon working areas, the SuDS basin locations and the EACN access road in the Districts of Babergh and Tendring between JC11 just south of the Mid Suffolk/Babergh border in the north to pylon TB 20 at the Tendring/Colchester border in the south-west. There are some gaps in the data due to: no haul road (JC16 to JC17, TB15 to TB16), haul road uses existing route (TB20) refused access/unsuitable ground conditions (132kV underground cable replacing PHB26 to PHB21, 132kV underground cable replacing PCB5 to PCB4, JC16 and associated haul road, haul road between JC18 and JC21 and including JC19 and JC20).
- 11.5.118 The Phase 2 geophysical survey of Section C is largely complete with the exception of the gaps in the collected data noted in the paragraph above. The survey has confirmed and/or expanded known cropmark sites mapped by the Project (**3332**, **3333**, **3341**, **3334**) and the HER (**3219**), adding and confirming predominantly field boundaries across these assets. Across the survey area anomalies indicative of field drains, ploughing, former ponds, magnetic disturbance and natural variation were also identified. The survey also identified anomalies of 'archaeological', 'possible archaeological' and 'uncertain' origin and where these features fall outside known assets or where they are incongruous with the nature of the asset they fall within, they have been identified as new assets. The new assets identified by the Phase 2 geophysical survey comprise:
- Asset (**3297**) comprises a group of linear 'archaeological' and 'possible archaeological' anomalies forming a north/south aligned trackway with several perpendicularly appended enclosures with numerous internal, discrete features.

Located north, south and adjacent to pylon JC12. This asset is of medium value based on its evidential value.

- Asset (**3298**) comprises linear and discrete 'archaeological' and 'possible archaeological' anomalies forming three sides of a presumably square or rectangular enclosure up to 135 m across with several internal discrete anomalies. Located between pylons JC31 and JC32. This asset has the potential to be a Romano-British villa site and is of medium value based on its evidential value
- Asset (**3306**) comprises a group of discrete and short curvi-linear undated 'uncertain origin' anomalies, located within the EACN access road to the west of Little Bromley. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value.

Archaeological Trial Trench Survey

- 11.5.119 There are three priority archaeological trial trenching areas located within Section C. The northernmost trenching area covers the route of the Project between the Wenham Grove CSE compound in the north, to the Stour river valley in the south and corresponds to the portion of the Project covered by the northernmost priority geophysical survey area.
- 11.5.120 The archaeological contractor has split Site 08 into sub-sections (Areas) largely based on field boundaries and roads, and these Areas are numbered from 15 in the north to 22 in the south. The summary results of the trial trenching, where complete, are reported below with reference to Areas 15S, 15C, 15N, 16, 17, 18, 19 and 21, 22, and 22N.

Area 15S

- 11.5.121 Area 15S is across four fields and is located north-east of the B1070 and east of Raydon. It encompasses two temporary construction compounds (JC-CC02 and JC-BC01), underground cable route, bellmouth works, and the temporary bypass haul road. A total of 126 trenches were excavated revealing archaeological features in 58 of the trenches, comprising 93 discrete and 70 linear cut features, as well as three spreads and one structure. The archaeological remains identified with Area 15S spanned a range of periods, with potential Romano-British activity being the most prominent in the central portion of the Area. The Romano-British remains included boundary ditches and postholes in the northern portion of Field 4 (**3282**), and a possible trackway and associated enclosures with internal features (**3281**) further to the south and west of Acacia Road. These Romano-British assets are of low value based on their evidential and historical values. Natural features were limited across the area; however, a possible pond was noted near the eastern boundary of the site (possibly **3452**). Two boundary ditches likely representing the remnants of a medieval field system were observed. Also, the northeastern edge of the RAF Raydon (**3189**) runway was identified through a drainage ditch which correlated with the position of the runway identified on the geophysical survey and historic maps. Modern field boundary ditches were also observed. Due to the realignment of the construction swathe within this portion of Site 08, the trenching of Area 15S is not yet complete.

Area 15C

- 11.5.122 Area 15C is located within the bounds of the former RAF Raydon (**3189**) and north-east of Raydon. It encompasses the underground cable route, temporary attenuation drainage works, bellmouth works, and the temporary bypass haul road. The fieldwork comprised the excavation of 83 trenches revealing three discrete features, 16 linear features, and eight archaeological layers across 16 of the trenches. The archaeological remains comprised a late medieval / post medieval field boundary, an area of possible late prehistoric / Romano-British activity, and an area of Romano-British activity. The late prehistoric / Romano-British remains (**3282**) comprised ditches, pits and spreads and represented a likely continuation of the activity seen in the northern end of Area 15S. Further evidence of Romano-British activity (**3290**) comprising a truncated ditch and possible occupational spreads represented by uncertain magnetic geophysical disturbance at the northern end of Area 15C. Asset (**3290**) is of low value based on its evidential and historical values.

Area 15N

- 11.5.123 Area 15N is located almost entirely within the bounds of the former RAF Raydon (**3189**) and north-east of Raydon. It encompasses the underground cable route, 400kV full line tension gantries JC34-35 within the Wenham Grove CSEC Compound, Land east of Woodland Road, north of Raydon Cable Sealing End Compound (JC-SC01), temporary and permanent attenuation drainage works, a permanent spoil bund, an environmental area, the bypass haul road, and bellmouth works. The fieldwork comprised the excavation of 147 trenches revealing 22 linear features and three discrete features. The identified archaeological remains comprise late medieval / post medieval field boundaries (**3335**), the north-east corner of a probable Romano-British enclosure (**3291**) a Romano-British ditch and partially exposed possible kiln (**3292**), and an undated possible cremation (**3293**). Assets (**3291**, **3292** and **3293**) are of low value based on their evidential and historical values.

Area 16

- 11.5.124 Area 16 is located adjacent to the B1070 and Acacia Road, and encompasses the temporary haul road, two temporary construction compounds (JC-BC01, JC-CC02), temporary infiltration drainage works, and bellmouth works. Fifteen trenches were excavated with only a single discrete undated pit identified within the Area. The cropmarks of two possible boundary ditches to the east of the Area identified by the Project (**3336**), were not seen in the geophysical or trenching results.

Area 17

- 11.5.125 Area 17 is located between the B1070 and Raydon Road, and encompasses the underground cable route, UKPN pole uplifting, temporary infiltration drainage works, bellmouth works, and the cabling haul road. Fifty-six trenches were excavated with archaeological features and deposits noted within 22 of the trenches, comprising two discrete features, seven linear features, three spreads / layers, and a furrow. The archaeological remains within Area 17 broadly matched the results of the geophysical survey. They primarily comprise the remains of an Iron Age to Romano-British sub-square enclosure that was identified as a cropmark by the Project (**3337**) in the centre of the Area and some limited prehistoric activity in the north (**3283**). The prehistoric remains are of low value based on their evidential value. The ditches of the 70 m x 76 m enclosure were identified as were the ditches of an internal smaller

sub-enclosure. The smaller enclosure was cut into a spread of archaeological material, possibly representing an occupation layer or levelling deposit. Little activity was recorded outside of the enclosure, with a boundary ditch and possible prehistoric drainage ditch recorded in the south of the Area.

Area 18

- 11.5.126 Area 18 is located between Raydon Road in the north and Sandpits Lane to the south-east. The Area encompasses the underground cable route, temporary infiltration drainage works, and bellmouth works. Fifty-four trenches were excavated with archaeological features and deposits noted within 19 of them, comprising eight discrete features, 14 linear features, two spreads, and a palaeochannel containing residual prehistoric finds. The archaeological remains were primarily medieval and post-medieval in date. Medieval activity was represented by two parallel north-east/south-west boundary ditches (**3280**), which contained ceramic building material (CBM) and pottery sherds. These features are of low value based on their evidential and historical and were not identified by the geophysical survey. Post medieval activity was represented by two north-west / south-east boundary ditches, previously identified by geophysical survey and Project cropmark mapping (**3338**). Post-medieval glass was recovered from the fill of one of the ditches. Two palaeochannels were also identified, which matched previous geophysics results. These features contained residual prehistoric finds, and their form and fills indicated a high level of water activity. The archaeological remains are limited to field boundaries with the alignment of the post medieval ditches different to that of the medieval ditches, suggesting a reorganisation of the field.

Area 19

- 11.5.127 Area 19 is located between Sandpits Lane in the north and the B1068 in the south and encompasses underground cable route, UKPN pole uplifting works, and bellmouth works. A total of 84 trenches were excavated revealing archaeological features in 74 of the trenches, comprising 96 discrete and 136 linear cut features, as well as five spreads/ layers. The archaeological remains identified within Area 19 are thought to represent potential prehistoric activity, including ditches, several possible early prehistoric (Neolithic) pits, and enclosures (**3284**). These low value prehistoric remains are of evidential value and were recorded throughout the area, extending north and south. A potential medieval property boundary or possibly representing an earlier roadside ditch, was also identified running parallel to Sandpits Lane and c.60 m south of the medieval listed building Pintins (**1036984**). Additionally, a possible post medieval boundary was observed in the northern section of area 19, running east/west (**3338**).

Area 21

- 11.5.128 Area 21 is located between the B1068 (Holly Bush Corner/ Holtonwood Road) and Higham Road and is encompassing the temporary haul road and four fields. A total of 120 trenches were excavated revealing archaeological features in 43 of the trenches, comprising 10 discrete and 58 linear cut features. Archaeological remains were predominantly identified in the southern part of Area 21, with activity appearing to extend beyond the excavation limits. Several boundary features were observed, and associated finds suggest a possible prehistoric origin. A pit containing Bronze Age pottery was also recorded, along with a post medieval drainage ditch (**3339**).

Area 22

- 11.5.129 Area 22 is located on the north / north-eastern bank of the river Stour and south-west of Higham Road, c. 600-800 m north-west of Stratford St. Mary, Suffolk. The area includes the underground cable route and a temporary attenuation drainage area. Area 22 is immediately south of a high value complex of likely late prehistoric/ Romano-British cropmarks (**3168**) investigated as Area 22N and reported below. Sixty-one trenches were excavated with archaeological features identified in just three of them. The archaeological remains comprised five undated pits identified in three of the trenches. A linear cropmark identified by the Project as part of a wider Complex (**3339**) was shown to be a footpath.

Area 22N

- 11.5.130 Area 22N is located immediately north of Area 22, south-west of Higham Road and c. 900 m north-west of Stratford St. Mary, Suffolk. The area includes the underground cable route, which in this location will be trenchless. Twenty-nine trenches were excavated in Area 22N with archaeological remains identified in 28 of them. The archaeological remains comprise 16 discrete features and 60 linear features and relate to elements of a high value cropmark complex (**3168**) which includes a rectilinear enclosure (**3176**), a sub-rectangular enclosure (**3177**), and a semi-circular enclosure (**3188**) within the trenching area, and further elements to the south-east. Based on a preliminary appraisal of the small finds assemblage and the morphology of the archaeological remains, as indicated by cropmark data and the geophysical survey results, four broad phases of activity are suggested for Area 22N. Prehistoric activity is thought to include earlier curvilinear ditches located in the centre of the north of Area 22N, followed by later rectilinear enclosures situated in the south-east and extending east beyond the area limits as well as north into Area 21. Medieval activity is represented across the area by strip fields, and finally a modern ditch transects the area. Area 22N represents an area with high potential for further archaeological remains, likely relating to settlement on high ground next to the river Stour.
- 11.5.131 The second priority archaeological trial trenching area, Site 09, covers the route of the Project between the Stour river valley in the north to the new EACN Substation to the east of Ardleigh in the south and corresponds with the second priority geophysical survey area. The archaeological contractor has split Site 09 into sub-sections (Areas) largely based on field boundaries and roads, and these Areas are numbered from 24 in the north to 34 in the east with 60-62 located between 24 and 23 in the north. The summary results of the trial trenching, where complete, are reported below with reference to Areas 24, 25, 25N, 26, 27, 28, 29E, 29W, 30, 31, 32, 33, 34, 61, and 62.

Area 24

- 11.5.132 Area 24 is made up of three areas and is located west of the A12 Ipswich Road to the south-west of Stratford St Mary. The central area (Area 24) encompasses the cabling haul road, the underground cable route, bellmouth works, and temporary attenuation drainage works. The southern area (Area 24S) encompasses the cabling haul road, the underground cable route, and temporary attenuation drainage works. Area 24S has not yet been trenched. The northern area (Area 24N) encompasses a cable compound (JC-CC03), a batching compound (JC-BC02), temporary attenuation drainage works, bellmouth works, and the cabling haul road.

- 11.5.133 Thirty trenches were excavated in Area 24 (central) revealing two discrete features and four linear features. The majority of the archaeological remains identified at Area 24 (central) aligned with previously identified geophysical and cropmark anomalies of field boundaries (**3049**), which were located predominantly to the north of and in the east of the northern portion of the area. Two discrete features were located to the south-west of these boundaries, probably representing limited activity outside of the enclosed area. The exact dating of these features is still to be determined; however, preliminary dating suggests that Romano-British and medieval pot was amongst the assemblage.

Area 24N

- 11.5.134 Fifty trenches were excavated in Area 24N revealing 23 discrete features, 55 linear features and two modern spreads/layers. The identified archaeological remains were largely consistent with known cropmarks in the area (**3045**) and the findings of the geophysical survey. Most of the identified archaeological remains were undated, however, lithics recovered from a possible enclosure ditch in the south-west of the area suggest prehistoric activity. Three un-urned, and as yet undated cremations, were identified in the north-east quadrant of the area raising the possibility of the presence of a cemetery in the vicinity. The only other dated remains comprise two post medieval quarry pits located on the eastern edge of the area.

Area 25

- 11.5.135 Area 25 is located within three fields to the north of Perry Lane and west of Ipswich Road. The area encompasses the underground cable route, haul roads, and a UKPN pole uplifting area. The archaeology identified in Area 25 consisted of a sporadic array of post medieval agricultural ditches (**3071**) with little interpretive evidence. A small concentration of archaeological remains was noted in a trench in the north-eastern part of the Area where potential medieval pitting activity was encountered (**3285**). This asset is of low value based on its evidential and historical values.

Area 25N

- 11.5.136 Area 25N is located south of Black Brook, west of Ipswich Road (the old A12), east of Nightingale Hill, and immediately north of Area 25. The area includes the underground cable route and a temporary attenuation drainage area. Seven trenches were excavated in Area 25N revealing a single undated pit.

Area 26

Area 26 is located east of Langham between the A12 Ipswich Road in the north-west and Birchwood Road between the A12 and Lamb Corner in the south. The area includes the underground cable route, a pole uplifting works area, a temporary attenuation drainage works area, a trenchless crossing area, and a bellmouth works area. Seventy-four trenches were excavated in Area 26 revealing 16 discrete features, 32 linear features and two archaeological spreads. The linear features largely correspond with field boundaries identified by the geophysical survey, which are recorded on the first edition OS map of 1880. A small number of the linear features correspond with elements of HER mapped cropmarks (**3092**, **3238**), but more often elements of the cropmark complex were not identified. The finds assemblage is small and restricted to ceramic building material and a few sherds of

post medieval pottery. The CBM was recovered from several ditch sections whilst pottery was only recovered from two ditch sections. The discrete pits were undated but those in the mid-south portion of the site were likely used for waste disposal and contained high amounts of charcoal or heat affected material.

Area 27

- 11.5.137 Area 27 is located on the southern flank of Birchwood Road between Lamb Corner in the east and the A12 in the west. The area includes the underground cable route, a construction laydown area, and the Birchwood Road cable compound (JC-CC04). Sixty-six trenches were excavated in Area 27 revealing eight discrete features, 16 linear features, and spread deposit across 17 of the trenches. The identified archaeological remains largely correspond with elements of a cropmark complex (**3238**) previously assessed to be of medium value. The complex includes a sub-circular enclosure, a trackway and other linear features, although unmapped feature were also identified. The enclosure contained no dating evidence whilst a very small assemblage of probably early modern pottery was recovered from other features including the trackway. Maps of the area (Chapman and André 1777, Ordnance Survey 1805) suggest that the trackway once formed part of a lane that extended through the field to join the present Boxhouse Lane to the north and an unnamed lane to the south adjoining Malting Farm Lane. The feature is not depicted on the 1880 OS map of the area (surveyed in 1875), suggesting it fell out of use in the intervening 80 years. Given the evaluation results and the cartographic evidence, the cropmark complex is likely of post medieval/modern date and of low value rather than medium as previously suggested.

Area 28

- 11.5.138 Area 28 is a large field located between Ardleigh Road and Malting Farm Lane. It encompasses the underground cable route and corresponding construction access route along with a temporary infiltration pond. The archaeology identified in Area 28 predominantly represented post medieval to modern field boundaries (**3238**) evidence on the first edition OS map (1880) and previously identified within the geophysical survey. A variety of modern material, including metal farm equipment and plastic, confirmed the recent terminus of use of these features. Among the identified field boundaries was an east to west aligned parish boundary (**3238**) which exhibited a number of recuts along its length. A small selection of other sporadically placed linear ditches and pits were also identified within the area, however they are of unknown function and do not illuminate any specific areas of activity.

Area 29E

- 11.5.139 Area 29E is located within one large and one smaller field situated between Rookery Chase and a railway line to the east of Ardleigh. The area includes the underground cable route and corresponding construction access route along with pylons TB11 and TB10, the temporary haul road, overhead line mitigation works and crossing protection works. The evaluation trenches revealed archaeological remains across the area.

Bronze Age

- 11.5.140 The Bronze Age is largely represented by residual finds recovered from later features. However, a possible low value middle Bronze Age ditch of evidential value

was identified within a complex of undated and later features (**3296**) at the eastern limit of Area 29 immediately to the west of the A137 Harwich Road.

Potential Late Iron Age and Romano-British

- 11.5.141 A single small low value ring-ditch (**3286**) of evidential value was identified. No finds were recovered from the fill of the ditch, but it is possible the ditch may be the remains of a late prehistoric roundhouse.
- 11.5.142 A loose concentration of low value potential late prehistoric and Romano-British ditches of evidential value was also identified in the north-west (**3287**). These likely represent evidence of a small-scale Romano-British farmstead, perhaps with earlier Late Iron Age origins. The ditches identified within this area contained large quantities of Romano-British pottery, preliminarily thought to represent burnished and grey wares.

Medieval and post medieval

- 11.5.143 A possible medieval or post medieval pit was located within the western part of the area. The pit contained burnt bone, fired clay, CBM and burnt stone, all indicating evidence of burning prior to disposal, possibly indicating a rubbish or waste pit of some kind. No other evidence to indicate similar activity was recorded, and the feature appeared to be largely isolated.
- 11.5.144 Cropmarks of medieval and post medieval boundary and drainage ditches mapped by the HER (**3023**, **3208**) and the Project (**3362**) were identified across the area. A higher density of these were noted to the north-west but were also identified more widely across Area 29E. These ditches largely contained very homogenous, pale fills which were comparable to the surrounding natural, and suggest periods of waterlogging and natural infilling. These ditches can largely be attributed to longstanding agricultural use of the land.

Undated cremation

- 11.5.145 A pit with large quantities of cremated human bone was recorded at the eastern limit of the area immediately west of the A137 Harwich Road and within a wider complex of linear field boundaries identified by the trial trenching (**3296**). The human bone was only identified in the post-excavation phase of work and comprised moderately fragmented material including identifiable elements of the skull vault and humerus of an adult of unknown sex. There was very little evidence of charcoal and no artefactual evidence to indicate a date for the deposit. Archaeological features in the vicinity comprise a possible middle Bronze Age ditch, post-medieval field boundaries and undated ditches.

Area 29W

- 11.5.146 Area 29W is located between Rookery Road and Dedham Road. It encompasses the underground cable route, the cabling haul road, a temporary infiltration pond and overhead line mitigation works. The archaeological remains identified in Area 29W were largely represented by three field boundaries (**3362**) apparent on the first edition OS map of 1880. The remaining linear features identified were likely land subdivisions dating to a similar period based on the retrieval of finds. Several discrete features, rich in charcoal, were dotted across the area. These features were considered to be the result potential in-situ burning. No concentrations of this activity

were observed. One more notable feature was a large pit of unknown purpose located at the northern end of the area; its size uncharacteristically large in comparison to the other pits identified in the area. Due to the lack of other artefactual or ecofactual evidence from the pit, it is hypothesised that it may represent an extraction pit.

Area 30

- 11.5.147 Area 30 is located north-east of Ardleigh, between Harwich Road in the west and the railway between Ipswich and Colchester to the east. The area encompasses the underground cable route, pylon TB9 and its construction area, bellmouth works, and temporary infiltration drainage works. Twenty-three trenches were excavated in Area 30 revealing 20 linear features and six discrete features (**3024**). A post medieval field boundary was identified in two trenches that corresponded with an 'agricultural' geophysical anomaly. A small assemblage of pottery, ceramic building material, and industrial waste was recovered from some of the other features, but this material has yet to be dated. Other than the afore mentioned field boundary, the identified archaeological remains do not correspond to any geophysical anomalies or historic map features and so may potentially pre-date OS mapping.

Area 31

- 11.5.148 Area 31 is located north of Little Bromley Road, south of Spindles Farm, and east of Ardleigh. The area encompasses the underground cable route, temporary infiltration drainage works, a SuDS basin location, third party mitigation works, bellmouth works, and the temporary haul road. Forty-five trenches were excavated in Area 31 revealing nine discrete features and 46 linear features. Although largely undated, a small assemblage of possible Romano-British pottery was recovered from the ditches suggesting the presence of a field system of similar date (**3098**). The Romano-British asset (**3098**) is of low value base on its evidential and historical values. It is likely that the Romano-British activity is related to the cropmark complex of settlement activity and field systems to the south (**3218**) identified by the Essex HER, and which at its core, includes the scheduled elements of the complex (**1002146**). Evidence of post medieval activity was recorded in four adjacent trenches in the south of the area. The identified archaeological remains do not correspond to any geophysical anomalies or historic map features.

Area 32

- 11.5.149 Area 32 is located north of Little Bromley Road, east of Home Farm Lane and east of Ardleigh. The area encompasses underground cable route, overhead line mitigation works, bellmouth works, and temporary infiltration drainage works. Forty-eight trenches were excavated revealing 39 linear features and 12 discrete features. The archaeological remains comprise phased field systems and pits, one of which was dated to the early prehistoric period based on recovered pottery. The remains are comparable in nature with those identified in Area 31 to the north-west (**3098**) and so likely represent a continuation of this activity. Likewise, the archaeological remains in Area 32 probably represent a continuation of the settlement/agricultural activity to the south of Little Bromley Road indicated by HER cropmark complex (**3218**) which includes the Scheduled Monument (**1002146**).

Area 33

- 11.5.150 Area 33 is located immediately east of Hungerdown Lane, south-east of Mayfields Farm, and c. 1.8 km east of Ardleigh. The area encompasses part of the EACN Substation and a permanent spoil bund. Twenty-five trenches were excavated revealing three linear features. The northernmost of these assets corresponds with a field boundary recorded on 19th century OS mapping, whilst the others are likely related to cropmarks of ring ditches, trackways and field systems recorded by the HER (**3232**).

Area 34

- 11.5.151 Area 34 is located north and west of Grange Road to the east of Ardleigh. The area encompasses a substation compound (JC-SC07), temporary attenuation drainage works, underground cable route, and an environmental area. Seventy-six trenches were excavated revealing 26 discrete features, 94 linear features, and five spreads/layers. The archaeological remains indicate four phases of activity within the area dating to the prehistoric, Iron Age/Romano-British transitional, Romano-British, and post medieval periods (**3039**). Numerous undated features were also identified. A prehistoric phase is indicated by an assemblage of lithics and possible in situ prehistoric remains were identified in the south-east of the area. The Iron Age/Romano-British transitional remains comprise several large rectilinear enclosures and a possible pond again in the south-east of the area. One of the rectilinear enclosures was partially defined by a double ditch. The Romano-British period remains were largely concentrated in the southern half of Area 34 and comprised a major Roman road with a metalled surface, trackways, roadside ditches, pits and a boundary ditch. The post medieval period is represented by field boundaries, some of which are recorded on 19th century OS mapping, and a few ponds/dewponds.

Area 60

- 11.5.152 Area 60 is located on arable land equidistant between Stratford St Mary to the north-east and Boxted Cross in the south-west. The area encompasses the underground cable route, temporary attenuation drainage works, and bellmouth works. Seventy-four trenches were excavated revealing 67 linear features and six discrete features. The archaeological remains were largely undated, but Romano-British and post medieval/modern features were identified. Residual prehistoric pottery was also recovered from later features. The identified remains largely corresponded with HER and Project mapped cropmarks including a north-north-east/south-south-west aligned ditched trackway. The cropmarks (**3236**) cover a large area mostly to the north of Area 60 and comprise ring ditches, enclosures and trackways likely to be of late Iron Age/Romano-British date. The post medieval/modern remains comprise field boundaries and land drains.

Area 61

- 11.5.153 Area 61 is located immediately west of Dedham Road and equidistant between Stratford St Mary to the north-east and Boxted in the south-west. The area encompasses underground cable route, temporary attenuation drainage works, and bellmouth works. Forty-one trenches were excavated revealing nine discrete features and 28 linear features. The archaeological remains were largely undated, but medieval and post medieval features were identified. The medieval remains comprise three sides of an enclosure in the east of the area identified as a cropmark by the HER (**3263**), by the geophysical survey, and confirmed by the trenching. The date of

the enclosure is based on a single sherd of possible medieval pottery and so remains tentative at this stage. The post medieval period is represented by a low value brick-built cellar or ground floor of a small structure, and a brick-lined well (**3294**) of evidential and historical values. The building and well are not shown on the first edition OS map of 1880 and so their loss is likely to pre-date the drafting of the map.

Area 62

- 11.5.154 Area 62 is located between Dedham Road and Rectory Road, and between Boxted in the south-west and Stratford St Mary in the north-east. The area encompasses underground cable route, bellmouth works, and the cabling haul road. Forty-three trenches were excavated revealing 15 discrete features, 50 linear features, and two spreads/layers (**3295**). The low value archaeological remains are of evidential value and were largely undated; however, Romano-British and post medieval features were identified. The Romano-British remains comprised a boundary ditch and potentially associated pit along the southern edge of the area. The post medieval period was represented by field boundaries evident on the first edition OS map of 1880.
- 11.5.155 The third priority archaeological trial trenching area, Site 01, covers the new EACN Substation and associated Project elements which are incorporated within the third priority geophysical survey area. The archaeological contractor has split Site 01 into sub-sections (Areas) largely based on field boundaries and roads, and these Areas are numbered 1 to 3.

Area 1

- 11.5.156 Area 1 is located east of Ardleigh, north of Little Bromley Road, and east of Hungerdown Lane. The area includes the EACN Substation, pylons TB1 – TB3, the underground cable route, haul roads, temporary attenuation drainage works, a permanent attenuation drainage pond, a highways laydown area, a DNO substation, and substation compounds JC-BC03 and JC-SC06. The trial trenching revealed four phases of activity. The earliest consisted of a Bronze Age curvilinear ditch (**3232**) and pitting, this could potentially relate to a wider Bronze Age funerary landscape located to the south-west of the site. The next phases of activity consisted of drainage, boundary and enclosure ditches of Iron Age, medieval and post medieval date (**3232**). These were concentrated in the southern and eastern parts of the site. The lack of structural evidence associated with these time periods suggests that the landscape was primarily used for agricultural. It is likely that the archaeological features identified within the trial trench area represented the peripheries of activity observed in the wider landscape i.e. the scheduled remains of Crop mark site S of Ardleigh (**1002146**).

Area 2

- 11.5.157 Area 2 is located east of Ardleigh, north of Little Bromley Road, and west of Hungerdown Lane. The area includes the underground cable route, pylon TB4 and its associated pulling location, overhead line mitigation works, bellmouth works, and haul roads. Archaeological remains were revealed in four of the 16 excavated trenches comprising four ditches and three furrows (**3289**). No dating evidence was recovered, but based on the furrows, the remains are likely medieval to post medieval. Asset (**3289**) is of low value based on its evidential and historical values.

Area 3

- 11.5.158 Area 3 is located east of Ardleigh and west and south of Little Bromley Road. The area includes a temporary cable compound (JC-CC05), temporary infiltration works, bellmouth works, and the temporary haul road. The trenches revealed 19 linear features and five discrete features (**3288**). Dateable finds were limited and restricted to Iron Age pottery, and it is likely the identified archaeological remains are largely of the same period. This asset is of low value based on its evidential and historical values.
- 11.5.159 This report will be updated upon completion of the fieldwork, and a comprehensive account of the fieldwork's findings will be included in Appendix 11.5: Trial Trenching Results Report (Rev B) (document reference 6.11.A5).

Geoarchaeological and Palaeoenvironmental Assessment

- 11.5.160 A programme of geoarchaeological monitoring on geotechnical investigation works was undertaken to determine the potential for deposits of geoarchaeological and palaeoenvironmental significance that may be impacted by development. A total of 16 geotechnical investigation interventions were monitored within the Stour Valley, which covers parts of Section C, as detailed in Appendix 11.6: Geoarchaeological and Archaeological Monitoring of Ground Investigation Works Report (document reference 6.11.A6). Of these investigations, 10 were boreholes whilst the remaining six were machine-excavated trial pits.
- 11.5.161 A broad stratigraphic sequence was identified comprising a total of 14 major depositional phases from bedrock to topsoil. The intervening deposits are a complex sequence of gravels and sands associated with glacial and interglacial cycles deposited in the Pleistocene. The Pleistocene sequence in the vicinity of the Project shows that the bedrock has been incised to form the Stour Valley into which these Quaternary sediments have been deposited.
- 11.5.162 Glaciofluvial sand and gravel fill the base of the valley. This was likely deposited under high energy conditions associated with glacial outwash at the Anglian Glaciation stage. Deposition of these gravels appears to have blocked the flow of water, creating a lake further to the north, evidenced by later fine-grained sediments associated with low energy waterflow.
- 11.5.163 Further glacial and interglacial cycles following the end of the Anglian Glaciation led to the deposition of terrace gravels and sands, noted across the valley. The monitoring identified a number of discrete locations where peat deposits are present above coarse-grained deposits and overlain by further fine-grained fluvial material. These peats likely date to the Holocene and have the potential to improve the understanding of the prehistoric environment, as they generally have good preservation of organic material.
- 11.5.164 The main superficial deposits recorded in the monitoring have a range of low to high geoarchaeological potential. The surface of River Terrace Gravels have the potential to contain Lower and Middle Palaeolithic artefacts and discontinuous deposits of waterlogged organics and peats.
- 11.5.165 Peat deposits may contain partially decayed organic matter preserved with excellent preservation potential for palaeoenvironmental resources e.g. microfossils and macrofossils, as well as cultural remains.

- 11.5.166 Glaciolacustrine deposits of fine-grained sediments, formed in low-energy standing water environments, can provide laminations which can reflect seasonal cycles, providing information on palaeoenvironmental change.
- 11.5.167 In addition to the geoarchaeological monitoring, an archaeological watching brief was maintained during geotechnical investigation works in order to mitigate for impacts to potential archaeology in areas identified as having medium archaeological potential. A total of 37 pits were monitored across Section C.
- 11.5.168 Two test pits located to the west of Stratford St Mary noted rare fragments of fired clay in the topsoil, but no archaeological features were present within the pits. To the east of Ardleigh, a further four test pits and three infiltration pits were located within cropmark areas. Rare fragments of fired clay were observed in the topsoil of several of the pits and a single fragment of ceramic building material was noted and retained. No archaeological features were present within the pits. The remaining test pits were archaeologically sterile.

Section D: Colchester City Council

Summary of Desk-Based Assessment

- 11.5.169 Appendix 11.1: Historic Environment Baseline Report Rev B) (document reference 6.11.A1) provides a detailed overview of the heritage assets within the defined Study Areas for Section D and a discussion of the prehistoric and historical development of the landscape within this section of the Project.

Designated Heritage Assets

- 11.5.170 There are no World Heritage Sites, no registered battlefields and no registered parks and gardens within the Study Area of Section D. Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) has identified eight scheduled monuments, 284 listed buildings and three conservation areas within the Study Area of Section D. The Historic Environment Baseline Report has established that there would be no impact on the majority of these assets as their settings do not extend to the Order Limits, with the exception of the following, which are shown on Figure 11.2: Designated Heritage Assets Assessed in the ES Chapter (Rev B) (document reference 6.11.F2):
- One high value Grade I listed building
 - ‘Church of Saint James’ (**1224521**)
 - Four high value Grade II* listed buildings
 - ‘Barn To South West Of Little Tey House’ (**1266779**)
 - ‘Aldham Hall’ (**1306270**)
 - ‘Church Of St Margaret And St Catherine’ (**1170063**)
 - ‘Chapel Cottage’ (**1222607**)
 - 60 medium value Grade II listed buildings
 - See Historic Environment Baseline Report (document reference 6.11.A1) for details

- One medium value conservation area
 - ‘Fordstreet Conservation Area’ (**CA9**).

Non-Designated Heritage Assets

- 11.5.171 Details of medium, low and negligible value non-designated assets within the Order Limits in Section D are detailed within this section. In addition, details of non-designated assets of medium value within the Study Area whose settings extend to the Order Limits are also provided. These assets are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3). Details of negligible/low value non-designated assets located outside the Order Limits but within the Study Area are reported in the Historic Environment Baseline Report (document reference 6.11.A1).
- 11.5.172 There are 121 non-designated medium to negligible value heritage assets, potentially impacted by the Project, of prehistoric through to modern date recorded in the Essex and Colchester HERs, within the Order Limits of Section D. Also, there are three medium value non-designated assets within the Section D Study Area where their settings extend to the Order Limits.
- 11.5.173 The 121 non-designated medium to negligible value assets within the Order Limits and potentially impacted by the Project are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:
- Seventy-six PAS findspots
 - Four pillboxes
 - One WWII airfield
 - Three monument/findspots suggestive of funerary activity
 - Two cropmark complexes suggestive of funerary activity
 - Three buildings
 - One earthwork dyke
 - Three greens
 - Two moats
 - Four Roman roads
 - Nine cropmark complexes suggestive of agricultural practices
 - Thirteen cropmark complexes or features suggestive of settlement activity.
- 11.5.174 The three medium value non-designated assets whose setting extends to the Order Limits are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:
- A moat
 - Two historic farmsteads.
- 11.5.175 In addition to the cropmark complexes included on the Essex and Colchester HERs noted above, there are a further twelve non-designated low value cropmark complexes within the Order Limits of Section D that have been identified through the

analysis of aerial images. These assets largely comprise former field boundaries and enclosures noted on 19th and 20th century OS mapping, as shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3).

11.5.176 There are 36 negligible or low value non-designated features within the Order Limits of Section D identified through a review of historic mapping. The setting of these assets is not considered due to their values. These assets are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3) comprise:

- Two woodland copses
- Six ponds
- A railway
- An allotment
- A farm
- Ten parish boundaries
- Twelve hedgerows
- Three undefined boundaries.

Historic Landscape Characterisation

11.5.177 The historic landscape of the Project has been considered using a holistic approach aligned with the ELC definition of landscape as '*an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*' (ELC, Chapter I, Article 1). This approach makes use of nationally recognised HLC data to identify HLTs within the Project and its surrounding areas, which have been divided into individual HLUs across the Project. Using this approach, HLTs and HLUs within the Section D Order Limits in Essex have been organised thematically into the following historic landscape categories which are assessed:

- Farming
- Enclosed meadow
- Horticulture
- Parks and gardens
- Open land
- Land use – Water-based
- Woodland.

Farming

11.5.178 Farming of the land has been a continuous means of managing the landscape for centuries. Although evidence as early as the Mesolithic is present within the Study Area for human interaction with the landscape, an understanding of farming is present from the medieval period onwards. Character types within farming are influenced by field patterns and six identifiable types are present in Section D:

- **Pre-18th Century ‘Irregular’ Enclosure:** These low value landscapes comprise irregular enclosures that vary considerably in size and shape, forming both arable and pasture, and are widespread though more common to the north and west of the county. They are probably the result of piecemeal enclosure and may originate from the medieval period or earlier. Morphologically they tend to have sinuous edges and offset corners. There are 14 units of this HLC type that intersect with the Order Limits, distributed across Section D of the Project
- **Pre-18th Century ‘Irregular Sinuous’ Enclosure:** These low value landscapes comprise fields with parallel edges which are sinuous, being in a similar orientation, but moving towards and away from each other, with short boundaries cutting across. They appear similar to co-axial fields, but without the parallel sides. Some are thought to be a variant form of co-axial field system but may bear more relation to topography. Others may relate to former furlongs or common arable fields which also have a sinuous character. There are two units of this HLC type that intersect with the Order Limits, both located to the east of Coggeshall
- **Piecemeal enclosure by agreement:** These low value landscapes were created, by informal agreement, to subdivide a pre-existing earlier field system. They are characterised by straighter boundaries. Dating of origin is difficult but they usually predate the introduction of the later formal Parliamentary Enclosure Acts and thus may relate in certain parishes to the earlier acts of enclosure. There are six units of this HLC type that intersect with the Order Limits located between Fordstreet and Little Tey
- **Formal style Parliamentary Enclosure:** These medium value landscapes comprise a rigorous rectilinear field system that has overwritten any prior landscape enclosure pattern, usually either prior common arable field, or former heathlands, or wastes. They are associated with the later Parliamentary Enclosure Acts. There are four units of this HLC type that intersect with the Order Limits in Section D located to the north of Great Horkesley
- **20th century enclosure:** These negligible value landscapes comprise modern, small field enclosures, which can be either nested within a pre-existing field system or be a totally new field system that has overwritten the prior landscape. These occur either at random across the landscape or may be focused on the fringes of urban settlement, being part of the peri-urban fringe; or along new infrastructure such as motorways. They are usually identified as having straight edges or are rectilinear fields where corners meet and occur only on the more recent maps. There are 20 units of this HLC type that intersect with the Order Limits and that are distributed across Section D of the Project
- **Boundary loss:** These low value landscapes represent field boundary loss since the 1950s due to mechanisation and changes in agricultural practices. This may range from the loss of a single boundary merging two fields into one, or many field boundaries being removed to form a single field. The resultant field is a hybrid and palimpsest, with edges that may have several periods of origin. The surviving edges of these fields are of historic importance. There are 67 units of this HLC type that intersect with the Order Limits and that are distributed across Section D of the Project.

Enclosed meadow

11.5.179 Enclosed meadows in Section D are represented by the following HLC type:

- Enclosed meadow: These low value landscapes comprise sinuous fields that border rivers, often forming part of the floodplain/regime of the river, where the river floods naturally. They may be marked as areas of rough pasture. The traditional use from medieval times up to the 1950s was to produce a hay crop for winter fodder and for grazing. Some have been subsequently wooded or alternate with wooded areas along the river's course. There are five units of this HLC type that intersect with the Order Limits, distributed across Section D of the Project.

Horticulture

11.5.180 Horticultural practice in Section D is represented by the following two HLC types:

- Nursery with glass house: This negligible value HLC type covers nurseries and greenhouses for market gardening. They may sit within an earlier field boundary pattern or may have replaced it. These date from the late 19th/early 20th centuries. There is a single unit of this HLC type that intersects with the Order Limits in Section D, located south of Boxted
- Orchard: This negligible value HLC type covers orchards, either large commercial concerns or small orchards attached to larger homes or estates. Private orchards may occupy a field where the edge remains consistent through time but use within can vary between being used as orchard or cleared as a paddock. The earlier commercial orchards are defined by the pre-existing field systems in which they are planted. Later commercial orchards often remove prior boundaries and redefine field edges with new boundaries. Commercial orchards date from the late 19th century onwards but may be planted within earlier pre-existing field boundaries. Private orchards may predate the earliest map sources. There are two units of this HLC type that intersect with the Order Limits within Section D located north and south of Aldham.

Parks and gardens

11.5.181 Parks and gardens in Section D are represented by the following HLC types:

- Informal parkland: These landscapes comprise designed ornamental landscapes laid out around a 'great' or 'grand' house in the post medieval period, many by designers of national repute, such as Lancelot 'Capability' Brown and Humphry Repton. The parks may include a formal garden, lakes, woodland, avenues, rides, vistas, and architectural features such as a ha-ha, terrace, folly or grotto. There may be remains of greenhouses and icehouses. There is a single unit of this HLC type that intersects with the Order Limits in Section D located west of Great Horkesley and associated with the Grade II* listed Westwood Park
- Leisure/recreation: This type includes country parks, golf courses, caravan parks, camping grounds, playing fields and other areas of land used for recreation and leisure. This type may have completely reworked and destroyed previous elements of the landscape, or may retain elements of its previous use, such as former parkland, or of the surrounding character of the landscape, such as field boundaries, trees, and woodland. Golf initially became popular in the 19th century. The main development of this type is from the 20th century and is

continuing. There is a single unit of this HLC type that intersects with Order Limits located west of Gallows Green.

Open land

11.5.182 Open land in Section D is represented by the following HLC type:

- Commons with a built margin: These medium value landscapes are open areas, marked on the First Edition as 'common' or 'green'. They were traditionally used for pasturage of livestock. Commons with a built margin have a fringe of settlement around the margin, with clusters of houses and farms at road or track entrances. Some commons and greens have survived as amenity areas within or beside villages. Others have been developed for housing or formal recreational use. Most have been enclosed as part of agricultural improvement. These grazing commons are generally regarded as being early in origin. There is a single HLC unit of this type that intersects with the Order Limits located at Gallows Green.

Land use – water-based

11.5.183 Water-based land use in Section D is represented by the following HLC type:

- Reservoir: This negligible value HLC type covers a wide range of water bodies, including public water supply reservoirs, flooded mineral extraction pits, and farm reservoirs and ponds for irrigation and livestock use. Most were created in the 20th century, but farm ponds may go back, predating the earliest map sources. There are two units of this HLC type that intersect with the Order Limits within Section D, located north-east of Little Tey, and north-east of Fordham.

Woodland

11.5.184 Woodland in Section D is represented by the following HLC types:

- 18th – 20th century Woodland Plantation: This includes all managed and planted woodland which post-dates ancient woodland. These may be planted as commercial concerns or as ornamental woodland in association with informal parkland. There are four units of this HLC type that intersect with the Order Limits within Section D; three located north of Langham and one to the south-east of Langham.
- Ancient Woodland: Ancient woodland is defined by Natural England (2023) as '*Land that has had continuous woodland cover since at least 1600 AD and may be [...] ancient semi-natural woodland [...] sites that have retained the native tree and shrub cover that has not been planted, although it may have been managed by coppicing or felling and allowed to regenerate naturally.*' The predominant species are deciduous, broad-leaf trees and shrubs. In the Essex HLC, this category also includes traditional wood-pasture, where single or small groups of pollarded trees occur in pasture alongside small coppice-with-standards managed woodlands. Ancient woodland can preserve features which are natural such as an uneven land surface, or which predate the woodland such as prehistoric earthworks or medieval cultivation ridges where woodland has regenerated, or which relate to the woodland itself such as coppiced trees and wood banks. There are two units of this HLC type that intersect with the Order Limits within Section D, located south of Fordham and south-east of Aldham.

Protected Lanes

- There are three low value non-designated protected lanes of medieval date recorded by Colchester City Council within the Order Limits in Section D, therefore potentially impacted by the Project.

Geophysical Survey

Phase 1 Priority Geophysical Survey

- 11.5.185 Full details of the Phase 1 priority geophysical results, including a location figure, can be found in Appendix 11.4: Geophysical Survey (Priority Areas) Results Report (Rev B) (document reference 6.11.A4), a summary of which is provided in this section. Nine priority geophysical survey areas are located within the Section D Order Limits, and are detailed below and shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.186 The first priority geophysical survey area includes pylons TB22 to TB26, the temporary haul road, bellmouth works, one overhead lines crossing protection works, a pulling location associated with TB25 and seven SuDS basin locations. The geophysical survey of this area has been completed. The survey identified magnetic disturbances and anomalies linked to features of the former Boxted WWII airfield (**4063**). Also identified was asset (4020) which comprises undated 'uncertain origin' anomalies forming three sides of a possible rectilinear structure, located within the temporary haul road immediately west of pylon TB25. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value. Other anomalies are attributed to natural or agricultural causes, such as former boundaries and field drains. A linear, ditch-like anomaly at the western edge near Langham Lane remains unexplained.
- 11.5.187 The second priority geophysical survey area includes pylons TB31 to TB34, the temporary haul road, a pulling location associated with TB32, two SuDS basin locations, overhead line mitigation works, the Great Horkesley (EACN side) CSE compound, a permanent spoil bund, and a permanent attenuation drainage pond. The survey reports that the magnetic background is very homogenous. Findings are limited to buried service pipes and agricultural trend anomalies, such as former boundaries and field drains (**4211**).
- 11.5.188 The third priority geophysical survey area is a section of cable undergrounding between the Great Horkesley (EACN side) CSE compound in the east at Redhouse Lane, to the Great Horkesley (Tilbury side) CSE compound in the west at Crabtree Lane. As well as the cable undergrounding works and the two CSE compounds noted above, this priority area also includes the temporary construction compounds (TB-SC01, TB-CC02, TB-BC01, TB-CC03 and TB-SC04), several areas of attenuation drainage works, several works and storage compounds. The Project also includes pylons TB35 to TB37, bellmouth works, one overhead line crossing protection works, and a pulling location associated with pylon TB37. Identified geophysical linear anomalies largely comprise field boundaries recorded on 19th to 20th-century OS mapping, field drains and agricultural trends likely representing ploughing (**4062, 4366, 4367, 4368, 4050**). In the west of the survey area, however, within and around the bounds of the Great Horkesley (Tilbury side) CSE compound, the survey has revealed an approximately square enclosure c. 155 m across with internal divisions and numerous discrete features. These anomalies more than likely

represent the remains of a farmstead, the morphology of which suggests a broad date range of late Iron Age to medieval (**4050**). Asset (4021) was also identified in this priority area. It comprises undated 'uncertain origin' anomalies forming conjoined enclosures and discrete features within the 400 kV underground cable works area immediately west of London Road and c. 1.5 km north-west of Great Horkesley. This asset is of low value based on its evidential value.

- 11.5.189 The fourth priority geophysical survey area covers pylon TB41, One SuDS basin and the temporary haul road. The geophysical survey of this area has been completed. Findings are limited to agricultural trend anomalies, such as field drains (**4100**).
- 11.5.190 The fifth priority geophysical survey area is located west of Fossetts Lane, around pylon TB43 and includes one SuDS basin location, bellmouth works, one overhead line crossing protection works, overhead line mitigation works and the temporary haul road. The survey has identified two sides of a possible moat (**4104**), potential linear and discrete archaeological features as well as evidence of field drains and ploughing.
- 11.5.191 The sixth priority geophysical survey area covers pylons TB46 to TB50 and includes seven SuDS basin locations, pulling locations of pylon TB47 and TB50, bellmouth works, two overhead line crossing protection works, overhead line mitigation works and the temporary haul road. A small area to the north of pylon TB50 remains to be surveyed. The survey has revealed an arrangement of narrow strip enclosures and a small 9 m diameter ring ditch with an internal discrete anomaly and an entrance to the south-west (**4082**). A previous geophysical survey in 2013-14 of this area located a number of linear features that suggest ditched enclosures (interpreted as Romano-British but could be later). Evidence of field drains, and ploughing was also noted (**4090**). Near the pylon TB49 is the asset (**4103**), representing cropmarks of a ring ditch and large areas of amorphous cropmarks which may represent ground disturbance.
- 11.5.192 The seventh priority geophysical survey area covers pylon TB51, one SuDS basin, one overhead line crossing protection works, overhead line mitigation works, one construction laydown area and the temporary haul road. The geophysical survey revealed anomalies of uncertain origin two of which may form a discontinuous ring ditch, and anomalies indicative of field boundary ditches, field drains, magnetic disturbance, and natural variations (**4017**). Asset (**4017**) is of low value based in its evidential value.
- 11.5.193 The eighth priority geophysical survey area covers pylons TB56 to TB59, and includes a pulling location associated with pylon RG57, overhead line mitigation works, four SuDS basin locations, bellmouth works, two overhead line crossing protection work areas and the temporary haul road. The survey has revealed only natural features and evidence of field drains and ploughing (**4099**, **4084**).
- 11.5.194 The ninth priority geophysical survey area is located near pylons TB65 and TB66 and covers a small area immediately west of Great Tey Road. The survey area includes pylon TB65, three SuDS basin location, bellmouth works, one overhead line crossing protection work area, the temporary haul road and the temporary construction compound (TB-Sate1). The geophysical survey identified low value enclosures with a possible ring ditch and discrete features of evidential value (**4019**), former field boundaries and anomalies indicative of ploughing. This area (Area 48) has yet to be trenched.

Phase 2 Geophysical Survey

- 11.5.195 Full details of the Phase 2 geophysical results, including a location figure, are provided in Appendix 11.8: Geophysical Survey (Phase 2) Report (document reference 6.11.A8). A summary of the results is provided in this section, and the progress of the geophysical survey is shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.196 The Phase 2 geophysical survey in Section D was focused on the temporary haul road, the pylon working areas and the SuDS basin locations in the District of Colchester between pylon TB21 at the Colchester/Tendring border in the east to pylon TB70 at the Colchester/Braintree border. There is a gap in the data comprising a short section of haul road and two SuDS basins between pylons TB41 and TB42 due to refused access/unsuitable ground conditions.
- 11.5.197 The Phase 2 geophysical survey of Section D is complete with the exception of the gap in the collected data noted in the paragraph above. The survey has confirmed and/or expanded known cropmark sites mapped by the Project (**4362, 4363, 4365, 4369, 4370**) and the HER (**4107**), adding and confirming predominantly field boundaries across these assets. Across the survey area anomalies indicative of field drains, ploughing, former ponds, magnetic disturbance, and natural variations. The survey also identified anomalies of 'archaeological', 'possible archaeological' and 'uncertain' origin and where these features fall outside known assets or where they are incongruous with the nature of the asset they fall within, they have been identified as new assets. The new assets identified by the Phase 2 geophysical survey comprise:
- Asset (**4015**) comprises undated linear 'possible field boundary' anomalies forming small rectilinear fields not mapped by asset (**4362**) and not recorded on 19th century OS mapping. Located between pylons TB38 and TB39. This asset is of low value based on its evidential value.
 - Asset (**4016**) comprises a small group of undated 'uncertain origin' anomalies forming possible pits and short gullies located adjacent to pylon TB53. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its potential evidential value
 - Asset (**4022**) comprises undated 'uncertain origin' anomalies forming widespread long linear features, perhaps a field system, located within and around pylons TB62 to TB64, SuDS basins and the temporary haul road. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value

Asset (**4023**) comprises undated 'uncertain origin' anomalies forming a partial enclosure, within the temporary haul road and SuDS north-east of pylon TB70. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value.

Archaeological Trial Trench Survey

- 11.5.198 There are two priority archaeological trial trenching areas located within Section D.
- 11.5.199 The first priority archaeological trial trenching area (Site 10) is located between pylon TB32 and TB37 and covers a section of the Project which is largely underground cable. It covers the route of the Project between Great Horkesley (EACN side) CSE compound in the east at Redhouse Lane, to the Great Horkesley (Tilbury side) CSE compound in the west and corresponds with the third priority geophysical survey area

noted above. The archaeological contractor has split Site 10 into sub-sections (Areas) largely based on field boundaries and roads, and these Areas are numbered 35 in the east to 48 in the west. The summary results of the trial trenching, where complete, is reported below with reference to Areas 35 to 47.

Areas 35 to 38

- 11.5.200 Areas 35 to 38 are located between Redhouse Farm in the east and The Causeway in the west. A total of 167 trenches were excavated revealing archaeological features in 68 of the trenches, comprising 22 discrete and 74 linear cut features, as well as five spreads/layers. The archaeological remains identified within Areas 35 to 38 is predominantly thought to represent a post medieval to modern agricultural landscape, featuring both modern levelling deposits and a system of boundary ditches evident in historic mapping. Evidence for earlier activity is limited to a small number of medieval features concentration along the north edge of Area 38, which is suggestive of a higher potential for medieval activity located in the vicinity to the north of the Project. Almost all the trenched area falls within areas of cropmarks identified in the Essex/Colchester HERs (**4062**) and mapped by the Project (**4366**).

Area 39

- 11.5.201 Area 39 is located between The Causeway in the east and Breewood Hall Farm in the west. A total of 68 trenches were excavated revealing archaeological features in 24 of the trenches, comprising 12 discrete and 31 linear cut features, as well as nine spreads/ layers. The archaeological remains identified with Area 39 thought to represent a distinct concentration of Romano-British waste disposal and ditches (**4007**), located alongside an area of modern disturbance. This low value activity is of evidential value and is located toward the centre of the area, adjacent to the dividing field boundary. Further activity of this kind might be expected outside of the Project area to the north-west, however, it did not appear to extend further within the Project to the north-east and south-west. Area 39 falls outside any known cropmark complexes, however, the Romano-British remains may relate to a ditched, north/south aligned trackway and other linear feature (**4018**) immediately to the south-south-east and/or field boundaries (**4367**) immediately to the south-south-west.

Area 40

- 11.5.202 Area 40 is located on the southern flank of School Lane between The Causeway in the east and London Road in the west. A total of 69 trenches were excavated revealing archaeological features in 27 trenches, comprising nine discrete and 26 linear cut features. The archaeological remains identified in Area 40 are thought to represent a distinct concentration of medium value medieval activity (**4012**) of evidential and historical values likely relating to a farmstead, located at the easternmost extent of the area closest to The Causeway, which appears to have been a major route based on early mapping. Other archaeological remains within Area 40 appears limited to agricultural boundaries, although there is potential that these in some way relate to the medieval farmstead as they predate modern mapping. Almost all of Area 40 is located within a cropmark complex (**4367**) likely representing field boundaries. The easternmost portion of the Area, however, is located within cropmarks representing a ditched, north/south aligned trackway and other linear feature (**4018**).

Area 42

- 11.5.203 Area 42 is located north of School Lane and immediately east of London Road. A total of 15 trenches were excavated revealing archaeological features in five of the trenches, consisting of seven discrete features. The archaeological remains identified within Area 42 are undated and likely represents temporary activity. The post-holes and charcoal rich pits represent human activity, and may potentially be related to the post medieval agricultural landscape indicated by Project mapped cropmarks (**4367**) within which the remains are situated. No obvious concentrations of archaeological remains were noted within the Area.

Area 43

- 11.5.204 The archaeological evaluation of Area 43 has yet to be undertaken.

Area 44

- 11.5.205 Area 44 is located south of Little Horkesley between London Road in the east and Vinesse Road in the west and immediately east of Area 45. A total of 28 trenches were excavated revealing archaeological features comprising discrete features, linear cut features and a single spread/layer constituting a potential surface. The archaeological remains identified in Area 44, represented two main periods of activity. Probable medium value Romano-British activity of evidential and historical value was identified in the east of Area 44, consisting of a boundary ditch and a localised surface of compacted gravel (**4013**). A sherd of Samian Ware was identified in this location, which contributed to the tentative Romano-British date. If Romano-British, it is possible that this activity is related to the broader Romano-British landscape noted in both Areas 47 and Area 39, c. 1 km away to the west and east respectively. The second period of activity is post medieval and consisted of field boundaries evident on the Ordnance Survey maps of 1880, and consistent with the Project mapped cropmarks (**4368**) Area 44 falls within.

Area 45

- 11.5.206 Area 45 is located south of Little Horkesley between London Road in the east and Vinesse Road in the west and immediately west of Area 44. A total of 22 trenches were excavated revealing linear cut features. These ditches date to the post medieval period and largely correspond with geophysical anomalies and Project mapped cropmarks (**4368**).

Area 46

- 11.5.207 Area 46 is located between Vinesse Road in the east and Crabtree Lane in the west. A total of 54 trenches were excavated revealing archaeological features in 26 trenches, comprising 22 linear cuts, five discrete features and a single archaeological spread/layer. The archaeological remains identified in Area 46 appears to be agricultural in nature, primarily comprising linear ditches, with higher density activity located toward the western extent of the area. Within Area 46 multiple phases of activity are suggested. Activity located in the east of site appeared to be medieval to post medieval in nature and includes several ditches which aligned with post medieval field boundaries identified in the historic mapping and cropmark survey (**4050**). The activity to the west of the site appears to be a continuation of the higher density archaeological activity suspected within Area 47 (see below).

Area 47

Romano-British

- 11.5.208 Area 47 is located immediately west of Crabtree Lane and immediately north of the B1508 Colchester Road. A total of 83 trenches were excavated revealing archaeological features in 44 trenches, comprising 42 discrete features, 101 linear features and 13 spread/ layers. Most of the activity revealed within Area 47 was concentrated around a Romano-British enclosure complex. This consisted of a main rectilinear enclosure, which contained internal features and divisions, in addition to two adjacent L-shaped enclosures. Within the south-eastern and south-western edges of the enclosure, a double ditch was identified, with evidence of recutting, indicating the maintenance and modification of the enclosure edges over time. Romano-British pottery, including sherds of Samian Ware pottery, and ceramic building material (CBM) were found throughout with moderate quantities of oyster shell also identified. Within the interior of the enclosure, multiple ditches were present which functioned as internal divisions, creating up to five separate spaces. A large amount of Romano-British tile was present within the features within the enclosure as well as in the topsoil in this area. Metal detecting also retrieved several metal artefacts, including two Roman coins from the topsoil. The south-eastern edge of a possible rectangular building was identified through two post-holes which contained post-pipes and packing material. A large amount of tile was recovered from the post-holes as well as pottery and a copper weight. Both post-holes were truncated by large, discrete features which contained similar redeposited material and represented later post-holes and a modification of the building. Overlying these was a layer of demolition debris containing a high quantity of tile and it was likely this would have originally formed part of the roof of the building. Within the south-western part of the enclosure, a possible kiln was identified, which may have been used for small scale industry, such as tile production. Adjacent to the kiln was a small rubbish pit which contained large pieces of tile. Surrounding the main enclosure to the north-east and south-east was an L-shaped enclosure ditch, which was originally identified on the geophysical survey as a modern field boundary, however, was subsequently proven to be Romano-British due to a high quantity of tile and pottery within its fills. The ditch appeared to have been deliberately backfilled, suggesting a change of land use at this time. Directly to the east, a further L-shaped enclosure was present which ran parallel to the rectilinear enclosure. Within the north-eastern edge, the enclosure was made up of multiple ditches which ran parallel to each other, likely indicating a re-establishment of the boundary over time, most likely later during the Romano-British period. A cremation was identified directly to the north-east of the eastern L shaped enclosure. The cremation was likely contemporary with the Romano-British use of the site and comprised the base of a pot which contained small fragments of burnt bone. Several large extraction pits were observed within the northern and western parts of the Area. These archaeological remains are assessed as asset (4050), which comprises field boundaries and a faint enclosure, the value of this which has been revised to medium following trial trenching.

Medieval

- 11.5.209 Medieval activity was concentrated within the north-eastern part of the site and consisted mainly of a series of boundary ditches that were likely constructed over at least two phases. The most substantial feature was a L-shaped boundary that extended north-west to south-east. Running parallel to this, a further boundary ditch was observed which contained several fragments of medieval pottery. A series of

small pits were also present which were likely contemporary. Further boundary ditches were observed extending east to west, running parallel to each other and likely representing the establishment of the boundary over time. Area 47 falls almost entirely within the bounds of a cropmark complex (**4050**), which includes field boundaries and a faint enclosure.

- 11.5.210 The second priority archaeological trenching area, Site 11, is located south of Great Tey Road, centred around pylon TB65 and extending south-east of TB66. The priority archaeological trenching area incorporates some elements of the Project identified relating to the ninth priority geophysical survey area noted above and is identified by the archaeological contractor as Area 48. The archaeological evaluation of Area 48 has yet to be undertaken. Further detail is included in Table 11.2 in relation to further environmental information to be provided.

Geoarchaeological and Palaeoenvironmental Assessment

- 11.5.211 A programme of geoarchaeological monitoring on geotechnical investigation groundworks was undertaken to determine the potential for deposits of geoarchaeological and palaeoenvironmental significance that may be impacted by development. A total of 16 geotechnical investigation interventions were monitored within the Stour Valley, which covers parts of Section D, detailed in Appendix 11.6: Geoarchaeological and Archaeological Monitoring of Ground Investigation Works Report (document reference 6.11.A6). Of these investigations, 10 were boreholes whilst the remaining six were machine-excavated trial pits.
- 11.5.212 A broad stratigraphic sequence was identified comprising a total of 14 major depositional phases from bedrock to topsoil. The intervening deposits are a complex sequence of gravels and sands associated with glacial and interglacial cycles deposited in the Pleistocene. The Pleistocene sequence in the vicinity of the Project shows that the bedrock has been incised to form the Stour Valley into which these Quaternary sediments have been deposited.
- 11.5.213 Glaciofluvial sand and gravel fill the base of the valley. This was likely deposited under high energy conditions associated with glacial outwash at the Anglian Glaciation stage. Deposition of these gravels appears to have blocked the flow of water, creating a lake further to the north, evidenced by later fine-grained sediments associated with low energy waterflow.
- 11.5.214 Further glacial and interglacial cycles following the end of the Anglian Glaciation led to the deposition of terrace gravels and sands noted across the valley. The monitoring identified a number of discrete locations where peat deposits are present above coarse-grained deposits and overlain by further fine-grained fluvial material. These peats likely date to the Holocene and have the potential to improve the understanding of the prehistoric environment, as they generally have good preservation of organic material.
- 11.5.215 The main superficial deposits recorded in the monitoring have a range of low to high geoarchaeological potential. The surface of River Terrace Gravels have the potential to contain Lower and Middle Palaeolithic artefacts and discontinuous deposits of waterlogged organics and peats.
- 11.5.216 Peat deposits may contain partially decayed organic matter preserved with excellent preservation potential for palaeoenvironmental resources e.g. microfossil and macrofossils, as well as cultural remains.

- 11.5.217 Glaciolacustrine deposits of fine-grained sediments, formed in low-energy standing water environments, can provide laminations which can reflect seasonal cycles, providing information on palaeoenvironmental change.
- 11.5.218 In addition to the geoarchaeological monitoring, an archaeological watching brief was maintained during geotechnical investigation works in order to mitigate for impacts to potential archaeology in areas identified as having medium archaeological potential. Two test pits were monitored in Section D. Despite being located adjacent to cropmark complexes, no archaeological features were recorded.

Section E: Braintree District Council

Summary of Desk-Based Assessment

- 11.5.219 Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) provides a detailed overview of the heritage assets within the defined Study Areas for Section E and a discussion of the prehistoric and historical development of the landscape within this section of the Project.

Designated Heritage Assets

- 11.5.220 There are no World Heritage Sites and no registered battlefields within the Study Area on Section E. Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) has identified 10 scheduled monuments, 203 listed buildings, three registered parks and gardens, and six conservation areas within the Study Area in Section E, which are shown on Figure 11.2: Designated Heritage Assets Assessed in the ES Chapter (Rev B) (document reference 6.11.F2). The Historic Environment Baseline Report has established that there would be no impact on the majority of these assets as their settings do not extend to the Order Limits, with the exception of the following, which are also shown on Figure 11.2: Designated Heritage Assets Assessed in the ES Chapter (Rev B) (document reference 6.11.F2), and comprise:
- Two high value scheduled monuments
 - ‘Coggeshall Abbey’ (**1018865**)
 - ‘Cressing Temple’ (**1002122**)
 - Six high value Grade I listed buildings
 - ‘Church Of St Mary and All Saints’ (**1169594**)
 - ‘The Abbot's Lodging and Corridor of Coggeshall Abbey’ (**1123191**)
 - ‘Guest House of Coggeshall Abbey’ (**1307071**)
 - ‘Church of St Nicolas, Coggeshall Abbey’ (**1337925**)
 - ‘The Barley Barn, 40 Metres North West of Cressing Temple Farmhouse’ (**1123865**)
 - ‘The Wheat Barn, 35 Metres North East of Cressing Temple Farmhouse’ (**1123866**)
 - Six high value Grade II* listed buildings
 - ‘Houchin’s Farmhouse’ (**1123187**)

- ‘Feeringbury Manor’ (**1306710**)
- ‘Ancillary Building 6 m South East of Feeringbury Manor’ (**1123828**)
- ‘Newneys Farmhouse’ (**1123450**)
- ‘Troys Hall’ (**1123457**)
- ‘Rivenhall Place’ (**1122598**)
- Forty-three medium value Grade II listed buildings
 - See Historic Environment Baseline Report (document reference 6.11.A1) for full details.

Non-Designated Heritage Assets

- 11.5.221 Details of medium, low and negligible value non-designated assets within the Order Limits in Section E are detailed within this section. In addition, details of non-designated assets of medium value within the Study Area whose settings extend to the Order Limits are also provided. These assets are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3). Details of negligible/low value non-designated assets located outside the Order Limits but within the Study Area are reported in the Historic Environment Baseline Report (document reference 6.11.A1).
- 11.5.222 There are 33 non-designated medium to negligible value heritage assets of prehistoric through to modern date, recorded in the Essex HERs within the Order Limits in Section E; and there are eight medium value non-designated assets within the Study Area where their settings extend to the Order Limits. These are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev B) (document reference 6.11.F3).
- 11.5.223 The 33 non-designated medium to negligible value heritage assets within the Order Limits and potentially impacted by the Project are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:
- Nine cropmark complexes suggestive of enclosure and possible settlement activity
 - Eight cropmark complexes suggestive of agricultural activity
 - A cropmark complex suggestive of funerary activity
 - A cropmark complex suggestive of industrial activity
 - A record of cropmarks and limited excavation indicating settlement activity
 - Two records for excavated archaeological remains indicative of agricultural activity
 - A milestone/waymarker
 - A moated site
 - Three former parklands
 - An artefact scatter suggestive of Romano-British settlement activity
 - A Roman road

- Two 20th century military sites
 - Two miscellaneous findspots.
- 11.5.224 The eight medium value non-designated assets whose settings extend to the Order Limits are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:
- One deserted medieval village
 - Three moats
 - One post medieval farm building
 - One former parkland
 - Cropmarks and excavated archaeological remains indicative of settlement activity in and around the scheduled monument (**1013831**)
 - One cropmark complex indicative of funerary activity.
- 11.5.225 In addition to the cropmark complexes identified by the Essex HER noted above, there are a further 10 non-designated low value cropmark complexes within the Order Limits of Section E that have been identified by the Project through the analysis of aerial images. These assets comprise former field boundaries and enclosures largely seen on 19th and 20th-century OS mapping, as shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3).
- 11.5.226 There are 56 non-designated low to negligible value features within the Order Limits of Section E identified through a review of historic maps carried out by the Project. These assets are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:
- Twenty-six pond sites
 - Eight parish boundaries
 - Nineteen hedgerows
 - One former parkland
 - One parkland boundary
 - One building and an associated pond.

Historic Landscape Characterisation

- 11.5.227 The historic landscape of the Project has been considered using a holistic approach aligned with the ELC definition of landscape as '*an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*' (ELC, Chapter I, Article 1). This approach makes use of nationally recognised HLC data to identify HLTs within the Project and its surrounding areas, which have been divided into individual HLUs across the Project. Using this approach, HLTs and HLUs within the Section E Order Limits in Essex have been organised thematically into the following historic landscape categories which are assessed:
- Farming (enclosed land)
 - Enclosed meadow

- Parks and gardens
- Land use – water-based
- Woodland.

Farming (enclosed land)

11.5.228 Farming of the land has been a continuous means of managing the landscape for centuries. Although evidence as early as the Mesolithic is present within the Study Area for human interaction with the landscape, an understanding of farming is present from the medieval period onwards. Character types within farming are influenced by field patterns and eight identifiable types are recorded in Section E:

- Pre-18th Century 'Irregular' Enclosure: These low value landscapes comprise irregular enclosures that vary considerably in size and shape, forming both arable and pasture, and are widespread though more common to the north and west of the county. They are probably the result of piecemeal enclosure and may originate from the medieval period or earlier. Morphologically they tend to have sinuous edges and offset corners. There are 14 units of this HLC type that intersect with the Order Limits distributed across Section E of the Project
- Pre-18th Century 'Irregular Sinuous' Enclosure: These low value landscapes comprise fields with parallel edges which are sinuous, being in a similar orientation, but moving towards and away from each other, with short boundaries cutting across. They appear similar to co-axial fields, but without the parallel sides. Some are thought to be a variant form of co-axial field system but may bear more relation to topography. Others may relate to former furlongs or common arable fields which also have a sinuous character. There are eleven units of this HLC type that intersect with the Order Limits distributed across Section E of the Project
- Pre-18th Century 'Co-axial' Enclosure: These low value landscapes have a distinctive boundary pattern of fields with roughly parallel boundaries, sinuous in form with irregular subdivisions, forming an irregular brick-like sequence. These cover large areas, often running up from a watercourse and across valleys. They are not dependent or reflective of topography. Woodlands may be a significant feature within the field pattern. It is thought these fields were predominantly grazing areas, hence their greater survival than arable fields. It is suggested that these fields date from the Anglo-Saxon or early medieval periods. There are two units of this HLC type that intersect with the Order Limits of Section E of the Project located south of Silver End and west of Feering
- Piecemeal enclosure by agreement: These low value landscapes were created, by informal agreement, to subdivide a pre-existing earlier field system. They are characterised by straighter boundaries. Dating of origin is difficult but they usually predate the introduction of the later formal Parliamentary Enclosure Acts and thus may relate in certain parishes to the earlier acts of enclosure. There are eight units of this HLC type that intersect with the Order Limits distributed across Section E of the Project.
- Formal style Parliamentary Enclosure: These medium value landscapes comprise a rigorous rectilinear field system that has overwritten any prior landscape enclosure pattern, usually either prior common arable field, or former heathlands, or wastes. They are associated with the later Parliamentary Enclosure Acts.

There is a single unit of this HLC type that intersects with the Order Limits in Section E located to the south of Silver End

- 20th century enclosure: These negligible value landscapes comprise modern, small field enclosures, which can be either nested within a pre-existing field system or be a totally new field system that has overwritten the prior landscape. These occur either at random across the landscape or may be focused on the fringes of urban settlement, being part of the peri-urban fringe; or along new infrastructure such as motorways. They are usually identified as having straight edges or are rectilinear fields where corners meet and occur only on the more recent maps. There are 14 units of this HLC type that intersect with the Order Limits and that are distributed across Section E of the Project
- Boundary loss: These low value landscapes represent field boundary loss since the 1950s due to mechanisation and changes in agricultural practices. This may range from the loss of a single boundary merging two fields into one, or many field boundaries being removed to form a single field. The resultant field is a hybrid and palimpsest, with edges that may have several periods of origin. The surviving edges of these fields are of historic importance. There are 57 units of this HLC type that intersect with the Order Limits and that are distributed across Section E of the Project
- Boundary loss – with relict elements: These low value landscapes represent field boundary loss since the 1950s due to mechanisation and changes in agricultural practices. Boundary loss with relict elements has elements of former boundaries within the field e.g. a field edge that does not connect to form a fully enclosed enclosure. There is a single unit of this HLC type that intersects with the Section E Order Limits located south-east of Silver End.

Enclosed meadow

11.5.229 Enclosed meadows in Section E are represented by the following HLC type:

- Enclosed meadow: These low value landscapes comprise sinuous fields that border rivers, often forming part of the floodplain/regime of the river, where the river floods naturally. They may be marked as areas of rough pasture. The traditional use from medieval times up to the 1950s was to produce a hay crop for winter fodder and for grazing. Some have been subsequently wooded or alternate with wooded areas along the river's course. There are five units of this HLC type that intersect with the Order Limits and that are distributed across Section E of the Project.

Parks and gardens

11.5.230 Parks and gardens in Section E are represented by the following HLC types:

- Informal parkland: These landscapes comprise designed ornamental landscapes laid out around a 'great' or 'grand' house in the post medieval period, many by designers of national repute, such as Lancelot 'Capability' Brown and Humphry Repton. The parks may include a formal garden, lakes, woodland, avenues, rides, vistas, and architectural features such as a ha-ha, terrace, folly or grotto. There may be remains of greenhouses and icehouses. There is a single unit of this HLC type that intersects with the Section E Order Limits, located on the south-eastern outskirts of Silver End and associated with the Grade II* listed Rivenhall Place

- **Leisure/recreation:** This type includes country parks, golf courses, caravan parks, camping grounds, playing fields and other areas of land used for recreation and leisure. This type may have completely reworked and destroyed previous elements of the landscape, or may retain elements of its previous use, such as former parkland, or of the surrounding character of the landscape, such as field boundaries, trees, and woodland. Golf initially became popular in the 19th century. The main development of this type is from the 20th century and is continuing. There are two units of this HLC type that intersect with the Order Limits in Section E located south-east of White Notley and south-east of Coggeshall Hamlet.

Land use – water-based

11.5.231 Water-based land use in Section E is represented by the following HLC type:

- **Reservoir:** This negligible value HLC type covers a wide range of water bodies, including public water supply reservoirs, flooded mineral extraction pits, and farm reservoirs and ponds for irrigation and livestock use. Most were created in the 20th century, but farm ponds may go back, predating the earliest map sources. There are two units of this HLC type that intersects with the Order Limits in Section E located south-east of White Notley and south-east of Coggeshall Hamlet.

Woodland

11.5.232 Woodland in Section E is represented by the following HLC types:

- **18th – 20th century Woodland Plantation:** This includes all managed and planted woodland which post-dates ancient woodland. These may be planted as commercial concerns or as ornamental woodland in association with informal parkland. There are three units of this HLC type that intersect with the Order Limits within Section E with two located north-south of White Notley and one to the south-east of Coggeshall Hamlet
- **Ancient Woodland:** Ancient woodland is defined by Natural England (2023) as *'Land that has had continuous woodland cover since at least 1600 AD and may be [...] ancient semi-natural woodland [...] sites that have retained the native tree and shrub cover that has not been planted, although it may have been managed by coppicing or felling and allowed to regenerate naturally.'* The predominant species are deciduous, broad-leaf trees and shrubs. In the Essex HLC, this category also includes traditional wood-pasture, where single or small groups of pollarded trees occur in pasture alongside small coppice-with-standards managed woodlands. Ancient woodland can preserve features which are natural such as an uneven land surface, or which predate the woodland such as prehistoric earthworks or medieval cultivation ridges where woodland has regenerated, or which relate to the woodland itself such as coppiced trees and wood banks. There are three units of this HLC type that intersect with the Order Limits within Section E, located south-east of Silver End, north of Fuller Street, and east of Silver Street.

Protected Lanes

- 11.5.233 There are two low value non-designated protected lanes of possible medieval date recorded by Braintree District Council within the Order Limits in Section E, therefore potentially impacted by the Project.

Geophysical Survey

Phase 1 Priority Geophysical Survey

- 11.5.234 Full details of the Phase 1 priority geophysical results, including a location figure, can be found in Appendix 11.4: Geophysical Survey (Priority Areas) Results Report (Rev B) (document reference 6.11.A4). Six priority geophysical survey areas are located within the Study Area in Section E of the Project Order Limits and are detailed in the paragraphs that follow and shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.235 The first geophysical survey area includes pylons TB72 and TB73, pulling position of pylon TB73, bellmouth works, one SuDS basin, a construction laydown area, one overhead line crossing protection works and the temporary haul road. The geophysical survey of this area is complete revealing former field boundaries, field drains, natural features and asset (5031) which comprises undated 'uncertain origin' anomalies forming the south-west corner of a small enclosure with two internal discrete features located immediately west of pylon TB72. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value. The second priority geophysical survey area is centred around pylon TB81, its associated pulling location, two SuDS basin locations, one overhead line crossing protection work area, overhead line mitigation works, bellmouth works and the temporary haul road. Only a small proportion of the geophysical survey area has been undertaken at the time of writing, revealing only anomalies related to agricultural ploughing and natural background variation.
- 11.5.236 The third priority geophysical survey area includes pylons TB84 to TB86, pulling locations associated with pylons TB84 and TB87, three SuDS basin locations, and the temporary haul road. The geophysical survey of this area has been partially completed, revealing a number of faint linear ditch-like anomalies of uncertain origin, possibly associated with former boundaries or ditch-like features with archaeological potential within areas of known cropmarks (**5127, 5119, 5240**,). Further anomalies of field drains, and natural background variations have also been identified.
- 11.5.237 The fourth priority geophysical survey area includes pylon TB99, one SuDS basin, bellmouth works, one overhead line crossing protection works, a construction laydown area and the temporary haul road. The geophysical survey of this area has not been undertaken yet.
- 11.5.238 The fifth priority geophysical survey area includes pylon TB104, one SuDS basin, bellmouth works, one overhead line crossing protection works, a construction laydown area and the temporary haul road. The geophysical survey of this area has not been undertaken yet.
- 11.5.239 The sixth priority geophysical survey area includes pylons TB109 to TB119, pulling locations associated with pylons TB110, TB115 and TB117, seven SuDS basin locations, two overhead line crossing protections works, two temporary and two permanent attenuation drainage ponds and their associated drainage channels, two

CSE compounds (Fairstead (EACN side) and Fairstead (Tilbury side)), two permanent soil bunds, temporary construction compounds (TB-SC05 and TB-CC06), and the temporary haul road. The geophysical survey has revealed, an uncertain curving ditch-like anomaly, potential archaeological remains, possibly indicating an enclosure, immediately to the east of an unnamed lane between Fairstead and Rank's Green, linear anomalies likely representative of field boundaries recorded on 19th century OS mapping (**5247**, **5248**, **5102**, **5103**), and anomalies indicative of field drains, ploughing and natural trends (**5249**).

Phase 2 Geophysical Survey

- 11.5.240 Full details of the Phase 2 geophysical survey results, including a location figure, are provided in Appendix 11.8 - Geophysical Survey (Phase 2) Report (document reference 6.11.A8). A summary of the results is provided in this section, and the progress of the geophysical survey is shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.241 The Phase 2 geophysical survey in Section E was focused on the temporary haul road, 132kV underground cable, the pylon working areas and the SuDS basin locations in the District of Braintree between pylon TB71 at the Braintree/Colchester border in the north-east to pylon TB123 at the Braintree/Chelmsford border in the south-west. There are some gaps in the data due to: no haul road (TB101 – B102); refused access/unsuitable ground conditions (a short section of the haul road between pylons TB90 to TB91, TB95 and associated haul road, TB105 to TB107). The Phase 2 geophysical survey of Section E is complete with the exception of the gaps in the collected data noted in the paragraph above. The survey has confirmed and/or expanded known cropmark sites mapped by the Project (**5244**, **5249**, **5251**, **5240**, **5243**) and the HER (**5077**, **5117**, **5104**), adding and confirming predominantly field boundaries across these assets. Across the survey area anomalies indicative of field drains, ploughing, former ponds, magnetic disturbance, and natural variations. The survey also identified anomalies of 'archaeological', 'possible archaeological' and 'uncertain' origin and where these features fall outside known assets or where they are incongruous with the nature of that asset they fall within, they have been identified as new assets. The new assets identified by the Phase 2 geophysical survey comprises:
- Asset (**5021**) comprises undated linear 'possible archaeology' and 'uncertain origin' anomalies forming enclosures and a possible trackway, and a partial possible sub-circular feature. Located partially within cropmarks (**5243**) and near pylon TB74. This asset is of low value based on its potential evidential value as potential evidence of agricultural activity
 - Asset (**5030**) comprises a small group of undated 'uncertain origin' linear anomalies forming possible enclosures located within (**5094**) and (**5095**), outside (**5244**), and to the east of pylon TB93. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
 - Asset (**5033**) comprises undated 'uncertain origin' anomalies forming a linear feature and a small circular feature, located within the 132kV underground cable works area north-east of pylon TB76. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
 - Asset (**5037**) comprises undated 'possible archaeology' and uncertain origin' anomalies forming small conjoined enclosures and a possible double ditched

circular feature, located within the 132kV underground cable works area east of pylon TB76. A non-archaeological origin for many of the elements of this asset cannot be ruled out, including the potential ring ditch, and so it is of low value based on its evidential value

- Asset (**5038**) comprises undated 'archaeology' and 'possible archaeology' anomalies forming small enclosures and discrete features likely representing agricultural activity, located within the temporary haul road north of pylon TB78. This asset is of low value based on its evidential value
- Asset (**5040**) comprises undated 'possible archaeology' and 'uncertain origin' anomalies forming enclosures and discrete features likely representing agricultural activity, located within the temporary haul road, a SuDS basin and the working area for pylon TB89. This asset is of low value based on its evidential value
- Asset (**5042**) comprises undated 'possible archaeology' anomalies forming three sides of an enclosure likely representing agricultural activity, within the temporary haul road and the working area for pylon TB91. This asset is of low value based on its evidential value.

Archaeological Trial Trench Survey

- 11.5.242 One priority archaeological trial trenching area, Site 12, is located within Section E. Site 12 is focused on the sixth priority geophysical survey area noted above, which incorporates pylons TB109 to TB115 and associated Project elements, shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4). The archaeological contractor has split Site 12 into sub-sections (Areas) largely based on field boundaries and roads, and these Areas are numbered 49, 50N and 50S. The summary results of the trial trenching, where complete, is reported below with reference to Areas 50N and 50S. Further detail is included in Table 11.2 in relation to further environmental information to be provided.

Area 49

- 11.5.243 The geophysical survey of Area 49 is complete, but due to access issues the trial trenching is yet to be undertaken.

Area 50N

- 11.5.244 Area 50N is located east of Fairstead Road, North of Fairstead, and west of White Notley. The area encompasses pylons TB111 – TB115, part of the construction work area for pylon TB110, part of the pulling location associated with pylon TB115, two cable sealing end compounds (Fairstead-EACN side CSE compound and Fairstead-Tilbury side CSE compound), two temporary construction compounds (TB-SC05 and TB-CC06), the underground cable route, the cabling haul road, the bypass haul road, permanent attenuation drainage works, and two permanent spoil bunds. Eighty-nine trenches were excavated revealing five linear features and one discrete feature. The five linear sections are representative of a cropmark identified by the Project as part of a wider complex (**5247**) of post medieval field boundaries. The small low value pit (**5009**) of evidential value was fully excavated resulting in a small assemblage of prehistoric pottery and burnt material.

Area 50S

- 11.5.245 Area 50S is located east of Fairstead Road, north of Fairstead, and west of White Notley. The area encompasses pylon TB110 and its associated pulling location, a SuDS basin location, an environmental area, and the temporary haul road. Twenty-nine trenches were excavated revealing low value features of evidential value comprising one discrete feature and eight linear features (**5010**). All the features were sterile and so are undated.

Geoarchaeological and Palaeoenvironmental Assessment

- 11.5.246 No geoarchaeological and palaeoenvironmental assessment is proposed at this stage in Section E.

Section F: Chelmsford City Council

Summary of Desk-Based Assessment

- 11.5.247 The Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) provides a detailed overview of the heritage assets within the defined Study Areas for Section F and a discussion of the prehistoric and historical development of the landscape within this section of the Project.

Designated Heritage Assets

- 11.5.248 There are no World Heritage Sites and no registered battlefields within the Study Area of Section F. Appendix 11.1: Historic Environment Baseline Report (document reference 6.11.A1) has identified six scheduled monuments, 212 listed buildings, two registered parks and gardens and six conservation areas within the Study Area of Section F, shown on Figure 11.2: Designated Heritage Assets Assessed in the ES Chapter (Rev B) (document reference 6.11.F2). The Historic Environment Baseline Report has established that there would be no impact on the majority of these assets as their settings do not extend to the Order Limits, with the exception of the following, which are also shown on Figure 11.2 (Rev B), and comprise:

- One high value scheduled monument
 - ‘Settlement Site at Ash Tree Corner’ (**1002140**)
- One high value Grade I listed building
 - ‘Langleys’ (**1305533**)
- Three high value Grade II* listed buildings
 - ‘Former Church of St James’ (**1122199**)
 - ‘Church of St Mary the Virgin’ (**1338425**)
 - ‘Moor Hall’ (**1237175**)
- Sixty-seven medium value Grade II listed buildings
 - See Historic Environment Baseline Report (document reference 6.11.A1) for full details

- Two medium value conservation areas
 - ‘Great Waltham Conservation Area’ (**CA55**)
 - ‘Little Waltham Conservation Area’ (**CA56**)
- One medium value registered park and garden
 - ‘Langleys’ (**1000241**).

Non-Designated Heritage Assets

- 11.5.249 Details of high, medium, low and negligible value non-designated assets within the Order Limits in Section F are detailed within this section. In addition, details of non-designated assets of high/medium value within the Study Area whose settings extend to the Order Limits are also provided. These assets are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3). Details of negligible/low value non-designated assets located outside the Order Limits but within the Study Area are reported in the Historic Environment Baseline Report (document reference 6.11.A1).
- 11.5.250 There are 21 non-designated high to low value heritage assets of prehistoric through to modern date recorded in the Essex HERs, within the Order Limits of Section F and therefore, potentially impacted by the Project. These are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3). These assets comprise:
- Two moated sites
 - A cropmark complex suggestive of funerary activity
 - Four cropmark complexes suggestive of settlement and enclosure activity
 - Eight cropmark complexes suggestive of agricultural activity
 - Two sites of findspot scatter of various Romano-British artefacts
 - Excavated archaeological remains indicative of Romano-British settlement activity
 - A Roman road
 - Two 20th century military assets.
- 11.5.251 Also, there are six high/medium value non-designated assets outside the Order Limits but within the Study Area where their settings extend to the Order Limits, shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3). These assets comprise:
- A cropmark complex suggestive of formal parkland features and agricultural activity
 - A cropmark complex suggestive of a Romano-British temple
 - Two artefact scatters suggestive of the Romano-British buildings
 - A moated site
 - A WWII auxiliary unit operational base.
- 11.5.252 In addition to the cropmark complexes included in the Essex HER noted above, there are a further 19 non-designated low value cropmark complexes within the Order

Limits of Section F that have been identified by the Project through the analysis of aerial images. These assets comprise former field boundaries largely seen on 19th and 20th century OS mapping, as shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3).

- 11.5.253 There are 54 non-designated low to negligible value features within the Order Limits of Section F identified through a review of historic maps carried out by the Project. The setting of these assets is not considered due to their values. These assets are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:

- Thirty-three ponds
- Twelve hedgerows
- Six parish boundaries
- Two areas of allotments
- A former farmstead.

Historic Landscape Characterisation

- 11.5.254 The historic landscape of the Project has been considered using a holistic approach aligned with the ELC definition of landscape as '*an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*' (ELC, Chapter I, Article 1). This approach makes use of nationally recognised HLC data to identify HLTs within the Project and its surrounding areas which have been divided into individual HLUs across the Project. Using this approach, HLTs and HLUs within the Section F Order Limits in Essex have been organised thematically into the following historic landscape categories which are assessed:

- Farming (enclosed land)
- Enclosed meadow
- Parks and gardens
- Land use – water-based
- Woodland
- Industrial.

Farming (enclosed land)

- 11.5.255 Farming of the land has been a continuous means of managing the landscape for centuries. Although evidence as early as the Mesolithic is present within the Study Area for human interaction with the landscape, an understanding of farming is present from the medieval period onwards. Character types within farming are influenced by field patterns and seven identifiable types are recorded in Section F:

- Pre-18th Century Unenclosed Common Arable: These landscapes are former arable areas which were held in common, traditionally farmed in strips with multi-ownership or tenancy, on a rotational system. They are usually associated with nucleated settlement. These fields are probably early medieval in origin and remained in use until the 19th century. They are sometimes marked on the OS first edition with pecked strips, or annotated on earlier maps as Common Fields,

or named. There is a single unit of this HLC type that intersects with the Section F Order Limits located south-west of Writtle

- Pre-18th Century 'Irregular' Enclosure: These low value landscapes comprise irregular enclosures that vary considerably in size and shape, forming both arable and pasture, and are widespread though more common to the north and west of the county. They are probably the result of piecemeal enclosure and may originate from the medieval period or earlier. Morphologically, they tend to have sinuous edges and offset corners. There are 43 units of this HLC type that intersect with the Order Limits distributed across Section F
- Pre-18th Century 'Irregular Sinuous' Enclosure: These low value landscapes comprise fields with parallel edges which are sinuous, being in a similar orientation, but moving towards and away from each other, with short boundaries cutting across. They appear similar to co-axial fields, but without the parallel sides. Some are thought to be a variant form of co-axial field system but may bear more relation to topography. Others may relate to former furlongs or common arable fields which also have a sinuous character. There are five units of this HLC type that intersect with the Order Limits distributed across Section F
- Piecemeal enclosure by agreement: These low value landscapes were created, by informal agreement, to subdivide a pre-existing earlier field system. They are characterised by straighter boundaries. Dating of origin is difficult but they usually predate the introduction of the later formal Parliamentary Enclosure Acts and thus may relate in certain parishes to the earlier acts of enclosure. There are 15 units of this HLC type that intersect with the Order Limits and that are distributed across Section F
- Boundary loss: These low value landscapes represent field boundary loss since the 1950s due to mechanisation and changes in agricultural practices. This may range from the loss of a single boundary merging two fields into one, or many field boundaries being removed to form a single field. The resultant field is a hybrid and palimpsest, with edges that may have several periods of origin. The surviving edges of these fields are of historic importance. There are 81 units of this HLC type that intersect with the Order Limits and that are distributed across Section F
- 20th century enclosure: These negligible value landscapes comprise modern, small field enclosures, which can be either nested within a pre-existing field system or be a totally new field system that has overwritten the prior landscape. These occur either at random across the landscape or may be focused on the fringes of urban settlement, being part of the peri-urban fringe; or along new infrastructure such as motorways. They are usually identified as having straight edges or are rectilinear fields where corners meet and occur only on the more recent maps. There are 27 units of this HLC type that intersect with the Order Limits and that are distributed across Section F
- Boundary loss – with relict elements: These low value landscapes represent field boundary loss since the 1950s due to mechanisation and changes in agricultural practices. Boundary loss with relict elements has elements of former boundaries within the field, e.g. a field edge that does not connect to form a fully enclosed enclosure. There are three units of this HLC type that intersect with the Section F Order Limits located south of Chatham Green, and north and west of Blasford Hill.

Enclosed meadow

11.5.256 Enclosed meadow in Section F is represented by the following HLC type:

- Enclosed meadow: These low value landscapes comprise sinuous fields that border rivers, often forming part of the floodplain/regime of the river, where the river floods naturally. They may be marked as areas of rough pasture. The traditional use from medieval times up to the 1950s was to produce a hay crop for winter fodder and for grazing. Some have been subsequently wooded or alternate with wooded areas along the river's course. There are eight units of this HLC type that intersect with the Order Limits distributed across Section F.

Parks and gardens

11.5.257 Parks and gardens in Section F is represented by the following HLC type:

- Leisure/recreation: This type includes country parks, golf courses, caravan parks, camping grounds, playing fields and other areas of land used for recreation and leisure. This type may have completely reworked and destroyed previous elements of the landscape, or may retain elements of its previous use, such as former parkland, or of the surrounding character of the landscape, such as field boundaries, trees, and woodland. Golf initially became popular in the 19th century. The main development of this type is from the 20th century and is continuing. There is a single unit of this HLC type that intersects with the Order Limits located south of Broad's Green.

Land use – water-based

11.5.258 Water-based land use in Section F is represented by the following HLC type:

- Reservoir: This negligible value HLC type covers a wide range of water bodies, including public water supply reservoirs, flooded mineral extraction pits, and farm reservoirs and ponds for irrigation and livestock use. Most were created in the 20th century, but farm ponds may go back, predating the earliest map sources. There are two units of this HLC type that intersect with the Order Limits within Section F of the Project located east of Chatham Green, and north of Little Waltham.

Woodland

11.5.259 Woodland in Section F is represented by the following HLC types:

- 18th – 20th century Woodland Plantation: This includes all managed and planted woodland which post-dates ancient woodland. These may be planted as commercial concerns or as ornamental woodland in association with informal parkland. There are five units of this HLC type that intersect with the Order Limits distributed across Section F of the Project
- Ancient Woodland: Ancient woodland is defined by Natural England (2023) as '*Land that has had continuous woodland cover since at least 1600 AD and may be [...] ancient semi-natural woodland [...] sites that have retained the native tree and shrub cover that has not been planted, although it may have been managed by coppicing or felling and allowed to regenerate naturally.*' The predominant species are deciduous, broad-leaf trees and shrubs. In the Essex HLC, this category also includes traditional wood-pasture, where single or small groups of pollarded trees occur in pasture alongside small coppice-with-standards managed

woodlands. Ancient woodland can preserve features which are natural such as an uneven land surface, or which predate the woodland such as prehistoric earthworks or medieval cultivation ridges where woodland has regenerated, or which relate to the woodland itself such as coppiced trees and wood banks. There are four units of this HLC type that intersect with the Order Limits within Section F of the Project, located south of Edney Common, west of Broomfield, west of Blasford Hill, and north of Little Waltham.

Protected Lanes

- 11.5.260 There are six low value non-designated protected lanes of medieval date recorded by Chelmsford City Council within the Order Limits in Section F, therefore potentially impacted by the Project.

Geophysical Survey

Phase 1 Priority Geophysical Survey

- 11.5.261 Full details of the Phase 1 priority geophysical results, including a location figure, can be found in Appendix 11.4: Geophysical Survey (Priority Areas) Results Report (Rev B) (document reference 6.11.A4), a summary of which is provided below. Six priority geophysical survey are located within Section F of the Project, and are detailed below and shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.262 The first geophysical survey area includes a construction laydown area, one SuDS basin and temporary haul road, to the north-west of pylon TB131. The geophysical survey of this area is yet to be undertaken.
- 11.5.263 The second priority geophysical survey area includes pylons TB132 to TB135, pulling locations associated with pylons TB132, TB133 and TB135, five SuDS basin locations, bellmouth works, one overhead line crossing protection work area, one temporary attenuation drainage pond and its associated drainage channel, construction laydown areas, temporary construction compound (TB-Main and TB-CC07) and the temporary haul road. The geophysical survey of this area has been completed revealing a few anomalies of uncertain origin, field boundary ditches, field drains, and evidence of ploughing (**6204, 6025**).
- 11.5.264 The third priority geophysical survey area includes pylons TB159 to TB161, the pulling location of TB161, a construction laydown area, two SuDS basins, and the temporary haul road. The geophysical survey of this area has been completed revealing anomalies including field drains, field boundaries (**6214**) and some possible archaeological anomalies comprising low value circular and semi-circular enclosures, a possible rectilinear enclosure and linear features (**6113**) of evidential value.
- 11.5.265 The fourth priority geophysical survey area includes pylons TB164 and TB165, a pulling location associated with pylon TB164, three SuDS basins, overhead line mitigation works, and the temporary haul road. The geophysical survey of this area has been completed revealing a series of possible archaeological linear anomalies, field drains, and evidence of ploughing (**6007**).
- 11.5.266 The fifth priority geophysical survey area includes pylons TB169 and TB170, the pulling location for TB170, two SuDS basins, one overhead line crossing protection work area, a construction laydown area and the temporary haul road. The geophysical survey of this area has been completed revealing former field

boundaries, evidence of ploughing, natural anomalies, and an uncertain anomaly (**6219**). The trial trenching of this area is yet to be undertaken.

- 11.5.267 The sixth priority geophysical survey area is located to the north and south of Ivy Barns Lane and includes pylons TB181 and TB182, three SuDS basins, pulling location of pylon TB181, bellmouth works, three overhead line crossing protection work areas, overhead line mitigation works, two construction laydown areas, the highways mitigation construction compound at Ivy Barns Lane, and the temporary haul road. The geophysical survey of the land to the south of Ivy Barns Lane has been completed revealing former field boundaries, field drains, evidence of ploughing, and natural features (**6224**).

Phase 2 Geophysical Survey

- 11.5.268 Full details of the Phase 2 geophysical survey results, including a location figure, are provided in Appendix 11.8 - Geophysical Survey (Phase 2) Report (document reference 6.11.A8). A summary of the results is provided in this section, and the progress of the geophysical survey is shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.269 The Phase 2 geophysical survey in Section F was focused on the temporary haul road, 132kV underground cable, the pylon working areas and the SuDS basin locations in the District of Chelmsford between pylon TB124 at the Chelmsford/Braintree border in the north-east to pylon TB185 at the Chelmsford/Brentwood border in the south. There are some gaps in the data due to: no haul road (TB139 to TB140, TB165 to TB166); former quarry site (haul road between TB157 to TB158); refused access/unsuitable ground conditions (TB177 to TB181).
- 11.5.270 The Phase 2 geophysical survey of Section F is complete with the exception of the gaps in the collected data noted in the paragraph above. The survey has confirmed and/or expanded known cropmark sites mapped by the Project (**6200, 6201, 6123, 6204, 6207, 6208, 6210, 6212, 6214, 6219, 6220, 6221, 6224**) and the HER (**6006, 6056, 6031, 6004**), adding and confirming predominantly field boundaries across these assets. Across the survey area anomalies indicative of field drains, ploughing, former ponds, magnetic disturbance, and natural variations. The survey also identified anomalies of 'archaeological', 'possible archaeological' and 'uncertain' origin and where these features fall outside known assets or where they are incongruous with the nature of the asset they fall within, they have been identified as new assets. The new assets identified by the Phase 2 geophysical survey comprise::
- Asset (**6083**) comprises undated 'possible archaeology' and 'uncertain origin' anomalies forming three sides of a possible enclosure with associated linear features possibly representing agricultural activity located between pylons TB141 and TB142. This asset is of low value based on its evidential value
 - Asset (**6002**) comprises undated 'uncertain origin' anomalies forming four linear features possibly linked to agricultural and located immediately north of pylon TB144. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its potential evidential value
 - Asset (**6014**) comprises undated 'possible archaeology' anomalies forming three sides of a possible enclosure possibly representing agricultural activity located at pylon TB145. This asset is of low value based on its evidential value

- Asset (**6015**) comprises undated 'possible archaeological' anomalies forming a linear feature and a possible, partial sub-circular enclosure possibly representing agricultural activity located between pylons TB145 and TB146. This asset is of low value based on its evidential value
- Asset (**6086**) comprises undated 'uncertain origin' anomalies forming a possible small circular enclosure located between pylons TB148 and TB149 and c. 130 m west of the known site of a possible Roman temple (**6062**). A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value.
- Asset (**6045**) comprises 'possible archaeology' and uncertain origin' undated anomalies forming a group of sub-circular anomalies, some with internal anomalies, and linear anomalies some of which correspond to elements of cropmark complex (**6212**). This asset is of low value based on its evidential value and is located partially within the working area of pylon TB155 and the associated temporary haul road
- Asset (**6064**) comprises undated 'archaeology' and 'possible archaeology' anomalies forming a group of conjoined irregular enclosures and linear anomalies possibly representing agricultural activity located between pylons TB156 and TB157. This asset is of low value based on its evidential value.
- Asset (**6073**) comprises undated 'uncertain origin' anomalies forming a group of discrete and linear anomalies including two sides of a possible enclosure. One linear anomaly likely part of cropmarks (**6004**). Located immediately south of pylon TB173. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
- Asset (**6075**) comprises undated 'uncertain origin' anomalies forming a penannular shaped anomaly of uncertain origin located north of TB174. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
- Asset (**6078**) comprises undated 'possible archaeology' and 'possible field boundaries' anomalies forming a small group of anomalies including two side of a possible enclosure, two discrete features, possible field boundaries unmapped by the OS. This asset is of low value based on its evidential value and is located north-west of pylon TB173.
- Asset (**6114**) comprises an undated 'uncertain origin' anomaly forming the south-east corner of a possible enclosure, located just within the temporary haul road and north-north-west of pylon TB150. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
- Asset (**6115**) comprises undated 'uncertain origin' anomalies forming the north-west corner of a possible enclosure and discrete feature, located within the working area for pylon TB158. This asset is of low value based on its evidential value
- Asset (**6120**) comprises undated 'possible archaeology' and 'uncertain origin' anomalies forming possible field boundaries and discrete features possibly representing agricultural activity and partially located within temporary haul road south-south-west of pylon TB164. This asset is of low value based on its evidential value.

Archaeological Trial Trench Survey

- 11.5.271 One priority archaeological trial trenching area is located within Section F (Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4)). The area is within the second priority geophysical survey area noted above. The archaeological contractor has completed the archaeological evaluation, recording the works as Site 13 – Area 51.

Area 51

- 11.5.272 Area 51 is located on the eastern flank of the A131 Braintree Road, c. 1.3 km north-east of Little Waltham and c. 1.4 km south of Chatham Green. The area includes pylon TB134, a temporary attenuation drainage pond and its associated drainage channel, a construction laydown area, and temporary construction compounds (TB-Main and TB-CC07). Ninety-four trenches were excavated in Area 51 revealing 15 discrete features and eight linear features. The linear features recorded in the northern portion of the Area correspond with Project mapped cropmarks within a cropmark complex (**6025**) recorded by the HER. These features are thought to date to the 18th century and have origins in the Acts of Inclosure. The highest potential for pre-medieval archaeological remains was noted in the south-east of the Area. This portion of the Area was the closest to previous excavations at Sheepcoates Farm (the scoped out MEX1049451), which is located c. 250 m to the south-east of Area 51. The low value archaeological remains in this portion of the evaluation are of evidential value and include a small number of linear and discrete features (**6000**) which are thought to be a continuation of the later Prehistoric to Romano-British activity identified during the Sheepcoates Farm excavations. Two trenches contained ditches that appeared to be a continuation of one of the field boundaries recorded during that excavation. There are also several probable extraction pits throughout this field that are likely associated with previously recorded prehistoric activity.

Geoarchaeological and Palaeoenvironmental Assessment

- 11.5.273 No geoarchaeological and palaeoenvironmental assessment is proposed at this stage in Section F.

Section: G Brentwood Borough Council and Basildon Borough Council

Summary of Desk-Based Assessment

- 11.5.274 The Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) provides a detailed overview of the heritage assets within the defined Study Areas for Section G and a discussion of the prehistoric and historical development of the landscape within this section of the Project.

Designated Heritage Assets

- 11.5.275 There are no World Heritage Sites and no registered battlefields within the Study Area of Section G. Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) has identified five scheduled monuments, 92 listed buildings, one registered park and garden and nine conservation areas within the Study Area of Section G. The Historic Environment Baseline Report has established that there would be no impact on the majority of these assets as their settings do not extend to the Order Limits, with the exception of the following, which are shown on

Figure 11.2: Designated Heritage Assets Assessed in the ES Chapter (Rev B) (document reference 6.11.F2), and comprise:

- Two high value scheduled monuments
 - ‘Barn at Ingatestone Hall’ (**1002174**)
 - ‘Moated site immediately East of Heron Hall’ (**1016861**)
- Two high value Grade I listed buildings
 - ‘Ingatestone Hall’ (**1187315**)
 - ‘Church of St Giles’ (**1208238**)
- Six high value Grade II* listed buildings
 - ‘Gatehouse and courtyard ranges 30 metres West of Ingatestone Hall’ (**1197286**)
 - ‘Church of St Mary’ (**1264434**)
 - ‘Granary 5 metres South East of Heron Hall’ (**1280702**)
 - ‘Church of All Saints’ (**1297263**)
 - ‘Granary 130 Metres North West Of Ingatestone Hall’ (**1298752**)
 - ‘Church of St Margaret’ (**1338504**)
- Twenty-three medium value Grade II listed buildings
 - See Historic Environment Baseline Report (document reference 6.11.A1) for details
- Two medium value conservation areas
 - ‘Hutton Village Conservation Area’ (**CA17**)
 - ‘Little Burstead Conservation Area’ (**CA14**).

Non-Designated Heritage Assets

- 11.5.276 Details of medium, low and negligible value non-designated assets within the Order Limits in Section G are detailed within this section. In addition, details of non-designated assets of medium value within the Study Area whose settings extend to the Order Limits are also provided. These assets are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3). Details of negligible/low value non-designated assets located outside the Order Limits but within the Study Area are reported in the Historic Environment Baseline Report (document reference 6.11.A1).
- 11.5.277 There are 22 medium to low value non-designated heritage assets, potentially impacted by the Project, of prehistoric through to modern date, recorded in the Essex HER within the Order Limits of Section G; and there are two medium value non-designated assets within the Study Area whose setting extends to the Order Limits.
- 11.5.278 The 22 medium to low value non-designated assets within the Order Limits and potentially impacted by the Project are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:

- Eleven cropmark complexes suggestive of agricultural practices
- The route of a Roman road
- A possible deserted medieval village
- A settlement site suggested by cropmarks
- Three buildings
- Two post medieval findspots
- Two cropmarks of unknown period
- One moat.

11.5.279 The two medium value non-designated assets outside the Order Limits but within the Study Area where their settings extend to the Order Limits, are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:

- Two moated sites.

11.5.280 In addition to the cropmark complexes included in the Essex HER noted above, there are a further fifteen non-designated low value cropmark complexes within the Order Limits of Section G that have been identified by the Project through the analysis of aerial images, shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3). These assets comprise former field boundaries seen on 19th and 20th century OS mapping and the site of a former farm outbuilding.

11.5.281 There are 46 negligible or low value non-designated features within the Order Limits of Section G identified through a review of historic maps carried out by the Project. The setting of these assets is not considered due to their values. These assets are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:

- Twenty-three pond sites
- Two railway lines
- Eleven hedgerows
- Five parish boundaries
- One orchard
- One gravel pit
- Two woodlands
- One former ditch/stream or canal.

Historic Landscape Characterisation

11.5.282 The historic landscape of the Project has been considered using a holistic approach aligned with the ELC definition of landscape as '*an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*' (ELC, Chapter I, Article 1). This approach makes use of nationally recognised HLC data to identify HLTs within the Project and its surrounding areas which have been divided into individual HLUs across the Project. Using this approach, HLTs and

HLUs within the Section G Order Limits in Essex have been organised thematically into the following historic landscape categories which are assessed:

- Farming (enclosed land)
- Parks and gardens
- Land use – water-based
- Woodland.

Farming (enclosed land)

11.5.283 Farming of the land has been a continuous means of managing the landscape for centuries. Although evidence as early as the Mesolithic is present within the Study Area for human interaction with the landscape, an understanding of farming is present from the medieval period onwards. Character types within farming are influenced by field patterns and eight identifiable types are recorded in Section G:

- Pre-18th Century ‘Co-axial’ Enclosure: These low value landscapes have a distinctive boundary pattern of fields with roughly parallel boundaries, sinuous in form with irregular subdivisions, forming an irregular brick-like sequence. These cover large areas, often running up from a watercourse and across valleys. They are not dependent or reflective of topography. Woodlands may be a significant feature within the field pattern. It is thought these fields were predominantly grazing areas, hence their greater survival than arable fields. It is suggested that these fields date from the Anglo-Saxon or early medieval periods. There are three units of this HLC type that intersect with the Order Limits of Section G of the Project located between Stock in the east and Mountnessing in the west
- Dual-Axis Rectilinear ‘Co-axial’ Fields: This low value landscape comprises dual-axis or ‘Dengie-form’ fields which are similar to co-axial fields but exhibit dual axes, meaning their field boundaries run in two directions, roughly at right angles to each other. The fields are small and irregular in form, with corners being slightly offset, sinuous rather than geometrically regular. They usually run parallel with or across the contours of the land, despite the land being relatively flat. This type of field merges into co-axial or sinuous fields at the margins. Their period of origin is recognised as being old, but they are not of a single period. Some may be Roman or older in date, however, some may have their origin in the middle to late Saxon period. There are two units of this HLC type that intersect with the Order Limits of Section G of the Project located to the east and south-east of Herongate
- Pre-18th Century ‘Irregular’ Enclosure: These low value landscapes comprise irregular enclosures that vary considerably in size and shape, forming both arable and pasture, and are widespread though more common to the north and west of the county. They are probably the result of piecemeal enclosure and may originate from the medieval period or earlier. Morphologically they tend to have sinuous edges and offset corners. There are 12 units of this HLC type that intersect with the Order Limits distributed across Section G
- Pre-18th Century ‘Irregular Sinuous’ Enclosure: These low value landscapes comprise fields with parallel edges which are sinuous, being in a similar orientation, but moving towards and away from each other, with short boundaries cutting across. They appear similar to co-axial fields, but without the parallel sides. Some are thought to be a variant form of co-axial field system but may bear more relation to topography. Others may relate to former furlongs or common

arable fields which also have a sinuous character. There is a single unit of this HLC type that intersects with the Order Limits located east of Herongate

- **Piecemeal enclosure by agreement:** These low value landscapes were created, by informal agreement, to subdivide a pre-existing earlier field system. They are characterised by straighter boundaries. Dating of origin is difficult but they usually predate the introduction of the later formal Parliamentary Enclosure Acts and thus may relate in certain parishes to the earlier acts of enclosure. There are eight units of this HLC type that intersect with the Order Limits and that are distributed across Section G
- **Boundary loss:** These low value landscapes represent field boundary loss since the 1950s due to mechanisation and changes in agricultural practices. This may range from the loss of a single boundary merging two fields into one, or many field boundaries being removed to form a single field. The resultant field is a hybrid and palimpsest, with edges that may have several periods of origin. The surviving edges of these fields are of historic importance. There are 73 units of this HLC type that intersect with the Order Limits distributed across Section G
- **20th century enclosure:** These negligible value landscapes comprise modern, small field enclosures, which can be either nested within a pre-existing field system or be a totally new field system that has overwritten the prior landscape. These occur either at random across the landscape or may be focused on the fringes of urban settlement, being part of the peri-urban fringe; or along new infrastructure such as motorways. They are usually identified as having straight edges or are rectilinear fields where corners meet and occur only on the more recent maps. There are 13 units of this HLC type that intersect with the Order Limits distributed across Section G
- **Boundary loss – with relict elements:** These low value landscapes represent field boundary loss since the 1950s due to mechanisation and changes in agricultural practices. Boundary loss with relict elements has elements of former boundaries within the field e.g. a field edge that does not connect to form a fully enclosed enclosure. There are two units of this HLC type that intersect with the Order Limits located between Stock in the east and Mountnessing in the west.

Parks and gardens

11.5.284 Parks and gardens in Section G are represented by the following HLC types:

- **Informal parkland:** These landscapes comprise designed ornamental landscapes laid out around a 'great' or 'grand' house in the post medieval period, many by designers of national repute, such as Lancelot 'Capability' Brown and Humphry Repton. The parks may include a formal garden, lakes, woodland, avenues, rides, vistas, and architectural features such as a ha-ha, terrace, folly or grotto. There may be remains of greenhouses and icehouses. There is a single unit of this HLC type that intersects with the Order Limits located on the eastern outskirts of Brentwood
- **Leisure/recreation:** This type includes country parks, golf courses, caravan parks, camping grounds, playing fields and other areas of land used for recreation and leisure. This type may have completely reworked and destroyed previous elements of the landscape, or may retain elements of its previous use, such as former parkland, or of the surrounding character of the landscape, such as field boundaries, trees, and woodland. Golf initially became popular in the 19th century. The main development of this type is from the 20th century and is

continuing. There is a single unit of this HLC type that intersects with the Order Limits, located east of West Horndon.

Land use – water-based

11.5.285 Water-based land use in Section G is represented by the following HLC type:

- Reservoir: This negligible value HLC type covers a wide range of water bodies, including public water supply reservoirs, flooded mineral extraction pits, and farm reservoirs and ponds for irrigation and livestock use. Most were created in the 20th century, but farm ponds may go back, predating the earliest map sources. There is a single unit of this HLC type that intersects with the Order Limits within Section G located east of Brentwood.

Woodland

11.5.286 Woodland in Section G is represented by the following HLC type:

- 18th – 20th century Woodland Plantation: This includes all managed and planted woodland which post-dates ancient woodland. These may be planted as commercial concerns or as ornamental woodland in association with informal parkland. There are five units of this HLC type that intersect with the Order Limits located east of Brentwood.

Geophysical Survey

Phase 1 Priority Geophysical Survey

- 11.5.287 Full details of the Phase 1 priority geophysical results, including a location figure, can be found in Appendix 11.4: Geophysical Survey (Priority Areas) Results Report (Rev B) (document reference 6.11.A4), a summary of which is provided below. Five priority geophysical survey are located within Section G of the Project. These are detailed below and shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.288 The first priority geophysical survey area covers pylon TB186, a SuDS basin, overhead line crossing protection works, a construction laydown area, the highway mitigation construction compound at Church Lane, bellmouth works, overhead line mitigation works and the temporary haul road. The geophysical survey of this area has not yet been undertaken.
- 11.5.289 The second priority geophysical survey area covers pylons TB196 to TB198, a pulling location associated with TB196, three SuDS basin locations, bellmouth works, overhead line crossing protection works, and the temporary haul road. The geophysical survey has been completed revealing former field boundaries and agricultural anomalies (**6001**).
- 11.5.290 The third priority geophysical survey area includes pylon TB223, part of the pulling location associated with pylon TB224, four SuDS basins, bellmouth works, a construction laydown area, the highways mitigation construction compound at Dunton Road, a temporary construction compound (TB-Sate2A), and the temporary haul road. The geophysical survey has revealed two discrete features of uncertain origin, anomalies representative of ploughing, and natural trends.

- 11.5.291 The fourth priority geophysical survey area is located c. 300 m east of pylon TB225, c. 60 m west of Lower Dunton Road and is focused on a construction laydown area. The geophysical survey of this area revealed only anomalies indicating ploughing and natural trends.
- 11.5.292 The fifth priority geophysical survey area includes pylon TB226, a construction laydown area, overhead line mitigation works, a SuDS basin location, and the temporary haul road. The geophysical survey of this area revealed only anomalies indicating ploughing and natural trends.

Phase 2 Geophysical Survey

- 11.5.293 Full details of the Phase 2 geophysical results, including a location figure, are provided in Appendix 11.8 - Geophysical Survey (Phase 2) Report (document reference 6.11.A8). A summary of the results is provided in this section, and the progress of the geophysical survey is shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.294 The Phase 2 geophysical survey in Section G was focused on the temporary haul road, 132kV underground cable, the pylon working areas and SuDS basin locations in the Districts of Brentwood and Basildon between pylon TB186 at the Brentwood/Chelmsford border in the north to pylon TB231 at the Basildon/Thurrock border in the south. There are some gaps in the data due to: archaeological work (geophysical survey and trial trenching) unrelated to the Project already undertaken (TB224 and haul road); no haul road (TB202 to TB204); refused access/ unsuitable ground conditions (TB186 to TB189, TB207 to TB208, 132kV underground cable replacing PUB47 to PUB41, TB214 to TB216, haul road between TB227 and TB229, TB230 to TB231, some sections of the 132kV underground cable replacing PSC10 to PSC2). The Phase 2 geophysical survey of Section G is complete with the exception of the gaps in the collected data noted in the paragraph above. The survey has confirmed and/or expanded known cropmark sites mapped by the Project (**6229**, **7052**, **7055**) and the HER (**6178**, **6169**, **7006**), adding and confirming predominantly field boundaries across these assets. Across the survey area anomalies indicative of field drains, former ponds, ploughing, magnetic disturbance, and natural variation were also identified. The survey also identified anomalies of 'archaeological', 'possible archaeological' and 'uncertain' origin and where these features fall outside known assets or where they are incongruous with the nature of the asset they fall within, they have been identified as new assets. The new assets identified by the Phase 2 geophysical survey comprise:
- Asset (**7000**) comprises undated 'uncertain origin' anomalies forming a small partial subcircular enclosure with a central anomaly, located within the 132kV underground cable works c. 340 m east of pylon TB227. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
 - Asset (**7001**) comprises an undated curvi-linear 'uncertain origin' anomaly forming a possible partial enclosure, located within the working area for pylon TB218. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
 - Asset (**7002**) comprises a group of five discrete 'uncertain origin' anomalies of unknown origin/function, located within the temporary haul road and immediately

south-east of pylon TB225. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value

Archaeological Trial Trench Survey

- 11.5.295 One priority archaeological trial trenching area is located within Section G (Figure 11.4: Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4)). The area is focused around TB223 and the land to be occupied by the temporary construction compound (TB-Sate2A). At the time of writing, the trial trenching of this area has not been undertaken. Further detail is included in Table 11.2 in relation to further environmental information to be provided.

Geoarchaeological and Palaeoenvironmental Assessment

- 11.5.296 No geoarchaeological and palaeoenvironmental assessment is proposed at this stage in Section G.

Section H: Thurrock Council

Summary of Desk-Based Assessment

- 11.5.297 The Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) provides a detailed overview of the heritage assets within the defined Study Areas for Section H and a discussion of the prehistoric and historical development of the landscape within this section of the Project.

Designated Heritage Assets

- 11.5.298 There are no World Heritage Sites, no registered parks and gardens, and no registered battlefields within the Study Area of Section H. Appendix 11.1: Historic Environment Baseline Report (Rev B) (document reference 6.11.A1) has identified 11 scheduled monuments, 65 listed buildings and four conservation areas within the Study Area of Section H. The Historic Environment Baseline Report has established that there would be no impact on the majority of these assets as their settings do not extend to the Order Limits, with the exception of the following, which are shown on Figure 11.2: Designated Heritage Assets Assessed in the ES Chapter (Rev B) (document reference 6.11.F2), and comprise:

- Three high value scheduled monuments
 - ‘Earthworks near church, West Tilbury’ (**1002199**)
 - ‘Causewayed enclosure and Anglo-Saxon cemetery 500 m ENE of Heath Place’ (**1009286**)
 - ‘Crop mark complex, Orsett’ (**1002134**)
- Two high value Grade II* listed buildings
 - ‘Church of St James’ (**1111541**)
 - ‘Marshall's Cottages’ (**1337058**)
- Seventeen medium value Grade II listed buildings
 - See Historic Environment Baseline Report (document reference 6.11.A1) for details

- One high value conservation area
 - ‘West Tilbury Conservation Area’ (**CA28**).

Non-Designated Heritage Assets

- 11.5.299 Details of high, medium, low and negligible value non-designated assets within the Order Limits in Section H are detailed within this section. In addition, details of non-designated assets of high/medium value within the Study Area whose settings extend to the Order Limits are also provided. These assets are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3). Details of negligible/low value non-designated assets located outside the Order Limits but within the Study Area are reported in the Historic Environment Baseline Report (document reference 6.11.A1).
- 11.5.300 There are 40 non-designated, high to negligible value heritage assets of prehistoric through to modern date, recorded in the Essex HER within the Order Limits of Section H and, therefore, potentially impacted by the Project. These are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3), and comprise:
- Twelve cropmark complexes suggestive of enclosure, settlement and funerary activity
 - A site of excavated Iron Age archaeological remains
 - Two archaeological sites indicative of funerary activity
 - The site of a former brick works
 - Twelve find spots
 - A WWII bombing decoy
 - Three archaeological sites indicative of settlement activity
 - An archaeological site indicative of ritual activity
 - A multi-period cropmark site, which overlays the site of the scheduled monument 'Crop Mark Complex, Orsett' (**1002134**)
 - Six cropmark complexes suggestive of enclosure and settlement activity.
- 11.5.301 In addition to the cropmark complexes included in the Essex HER data noted above, there are a further eight non-designated low value cropmark complexes within the Order Limits of Section H that have been identified by the Project through the analysis of aerial images. These assets comprise former field boundaries and enclosures largely seen on 19th and 20th century OS mapping although unmapped features suggest earlier phases of activity, as shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3).
- 11.5.302 There are 18 non-designated low to negligible value features within the Order Limits of Section H identified through a review of historic maps carried out by the Project. These assets are shown on Figure 11.3: Non-Designated Heritage Assets Assessed in the ES Chapter (Rev D) (document reference 6.11.F3) and comprise:
- A canal/waterway
 - Five parish boundaries

- A clay pit
- A hedgerow
- Nine ponds/pond sites
- One woodland.

Historic Landscape Characterisation

11.5.303 The historic landscape of the Project has been considered using a holistic approach aligned with the ELC definition of landscape as ‘*an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*’ (ELC, Chapter I, Article 1). This approach makes use of nationally recognised HLC data to identify HLTs within the Project and its surrounding areas which have been divided into individual HLUs across the Project. Using this approach, HLTs and HLUs within the Section H Order Limits in Essex have been organised thematically into the following historic landscape categories which are assessed:

- Farming (enclosed land)
- Horticulture
- Parks and gardens
- Woodland.

Farming (enclosed land)

11.5.304 Farming of the land has been a continuous means of managing the landscape for centuries. Although evidence as early as the Mesolithic is present within the Study Area for human interaction with the landscape, an understanding of farming is present from the medieval period onwards. Character types within farming are influenced by field patterns and eight identifiable types are recorded in Section H:

- Dual-Axis Rectilinear ‘Co-axial’ Fields: This low value landscape comprises dual-axis or ‘Dengie-form’ fields which are similar to co-axial fields but exhibit dual axes, meaning their field boundaries run in two directions, roughly at right angles to each other. The fields are small and irregular in form, with corners being slightly offset, sinuous rather than geometrically regular. They usually run parallel with or across the contours of the land, despite the land being relatively flat. This type of field merges into co-axial or sinuous fields at the margins. Their period of origin is recognised as being old, but they are not of a single period. Some may be Roman or older in date, however, some may have their origin in the middle to late Saxon period. There are seven units of this HLC type that intersect with the Order Limits distributed across Section H
- Piecemeal enclosure by agreement: These low value landscapes were created, by informal agreement, to subdivide a pre-existing earlier field system. They are characterised by straighter boundaries. Dating of origin is difficult but they usually predate the introduction of the later formal Parliamentary Enclosure Acts and thus may relate in certain parishes to the earlier acts of enclosure. There are four units of this HLC type that intersect with the Order Limits and that are distributed across Section H
- Boundary loss: These low value landscapes represent field boundary loss since the 1950s due to mechanisation and changes in agricultural practices. This may

range from the loss of a single boundary merging two fields into one, or many field boundaries being removed to form a single field. The resultant field is a hybrid and palimpsest, with edges that may have several periods of origin. The surviving edges of these fields are of historic importance. There are 33 units of this HLC type that intersect with the Order Limits distributed across Section H

- 20th century enclosure: These negligible value landscapes comprise modern, small field enclosures, which can be either nested within a pre-existing field system or be a totally new field system that has overwritten the prior landscape. These occur either at random across the landscape or may be focused on the fringes of urban settlement, being part of the peri-urban fringe; or along new infrastructure such as motorways. They are usually identified as having straight edges or are rectilinear fields where corners meet and occur only on the more recent maps. There are four units of this HLC type that intersect with the Order Limits distributed across Section H
- Boundary loss – with relict elements: These low value landscapes represent field boundary loss since the 1950s due to mechanisation and changes in agricultural practices. Boundary loss with relict elements has elements of former boundaries within the field, e.g. a field edge that does not connect to form a fully enclosed enclosure. There is a single unit of this HLC type that intersects with the Section H Order Limits located north-east of Chadwell St Mary.

Horticulture

11.5.305 Horticultural practice in Section H is represented by the following HLC type:

- Orchard: This negligible value HLC type covers orchards, either large commercial concerns, or small orchards attached to larger homes or estates. Private orchards may occupy a field where the edge remains consistent through time but use within can vary between being used as orchard or cleared as a paddock. The earlier commercial orchards are defined by the pre-existing field systems in which they are planted. Later commercial orchards often remove prior boundaries and redefine field edges with new boundaries. Commercial orchards date from the late 19th century onwards but may be planted within earlier pre-existing field boundaries. Private orchards may predate the earliest map sources. There is a single unit of this HLC type that intersects with the Section H Order Limits located north-west of Linford.

Parks and gardens

11.5.306 Parks and gardens in Section H is represented by the following HLC type:

- Leisure/recreation: This type includes country parks, golf courses, caravan parks, camping grounds, playing fields and other areas of land used for recreation and leisure. This type may have completely reworked and destroyed previous elements of the landscape, or may retain elements of its previous use, such as former parkland, or of the surrounding character of the landscape, such as field boundaries, trees and woodland. Golf initially became popular in the 19th century. The main development of this type is from the 20th century and is continuing. There are three units of this HLC type that intersect with the Order Limits distributed across Section H.

Woodland

11.5.307 Woodland in Section H is represented by the following HLC types:

- 18th – 20th century Woodland Plantation: This includes all managed and planted woodland which post-dates ancient woodland. These may be planted as commercial concerns or as ornamental woodland in association with informal parkland. There are four units of this HLC type that intersect with the Order Limits distributed across Section H of the Project
- Ancient Woodland: Ancient woodland is defined by Natural England (2023) as 'Land that has had continuous woodland cover since at least 1600 AD and may be [...] ancient semi-natural woodland [...] sites that have retained the native tree and shrub cover that has not been planted, although it may have been managed by coppicing or felling and allowed to regenerate naturally.' The predominant species are deciduous, broad-leaf trees and shrubs. In the Essex HLC, this category also includes traditional wood-pasture, where single or small groups of pollarded trees occur in pasture alongside small coppice-with-standards managed woodlands. Ancient woodland can preserve features which are natural such as an uneven land surface, or which predate the woodland such as prehistoric earthworks or medieval cultivation ridges where woodland has regenerated, or which relate to the woodland itself such as coppiced trees and wood banks. There are three units of this HLC type that intersect with the Section H Order Limits within Section H located west of Linford.

Protected lanes

11.5.308 There is a single low value non-designated protected lane of medieval date recorded by Thurrock Council within the Order Limits in Section H, therefore potentially impacted by the Project.

Geophysical Survey

Phase 1 Priority Geophysical Survey

- 11.5.309 Full details of the Phase 1 priority geophysical results, including a location figure, can be found in Appendix 11.4: Geophysical Survey (Priority Areas) Results Report (Rev B) (document reference 6.11.A4), a summary of which is provided below. Seven priority geophysical survey located within Section H of the Project, and are detailed below and shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.310 The first priority geophysical survey area is centred around the temporary construction compound (TB-Sate2B), pylon TB233 and its associated pulling location, four SuDS basins, and the temporary haul road. The geophysical survey of this area is complete revealing anomalies representing natural features, field drains and ploughing.
- 11.5.311 The second priority geophysical survey area covers the route of the Project between just south of pylon TB252 in the north, to the Stanford-le-Hope bypass in the south. The survey area is located within a medium value cropmark complex (**8049**) likely representing late prehistoric/early Romano-British settlement activity. The survey area includes pylons TB253 and TB254, pulling locations associated with pylons TB252 and TB254, overhead line mitigation works, two SuDS basins, one overhead line crossing protection works, and the temporary haul road. The geophysical survey of this area has been completed revealing geophysical anomalies representing

natural features, field drains, field boundaries to the south of the northernmost SuDS basin and the south-east of the survey area, a possible trackway, and ploughing lines.

- 11.5.312 The third priority geophysical survey area covers the route of the Project which includes pylons TB259 to TB261, pulling locations associated with pylons TB259 and TB260, three SuDS basins, pylon tower to be dismantled PB22, UKPN 132kV overhead line mitigation works compound at PAB22, west of Buckingham Hill Road (PAB-C1), PAB Route 132kV temporary towers, overhead line mitigation work area and the temporary haul road. The survey area is located within a low value cropmark complex (**8104**) likely representing late prehistoric/early Romano-British activity, which itself is located within a wider archaeologically rich landscape. The geophysical survey of this area has been completed revealing geophysical anomalies representing natural features, a former pond, field drains, a field boundary, and ploughing.
- 11.5.313 The fourth priority geophysical survey area covers the route of the Project which includes Tilbury North Substation, pylons TB263, TB264, and parts of the area proposed for realignment of the YYJ overhead line, temporary and permanent attenuation works, a permanent spoil bund, overhead line crossing protection work areas, temporary construction compound (TB-SC08), and the temporary haul road. The hedgerow (**8264**) is within the geophysical survey area at the southernmost part. The geophysical survey of this area has been completed revealing geophysical anomalies representing possible archaeological linear features, natural features, field drains, a field boundary, ploughing, and archaeological trenches.
- 11.5.314 The fifth priority geophysical survey area covers the route of the Project which includes pylons YYJ124T and YYJ125T, pulling location of YYJ124T, YYJ125T, YYJ123RA and YYJ124RD, three temporary construction compounds, one permanent attenuation drainage works, and two temporary attenuation drainage works, three SuDS basins, (CSE) compounds Site west of Holford Road and east of Brentwood Road (ZB-SC01) and Site west of Holford Road and east of Brentwood Road (ZB-SC03), a secondary (cable) compound Site west of Holford Road and east of Brentwood Road (ZB-CC02) and the temporary haul road. The survey area is located partially within three low value cropmark complexes (**8066**, **8083** and **8088**), which likely represent evidence of late prehistoric into early Romano-British activity. The geophysical survey of this area is complete, revealing field boundaries, evidence of agricultural history, a large area of green waste, natural features, and unknown features.
- 11.5.315 The sixth priority geophysical survey area covers the route of the Project which includes pylons to be dismantled YYJ125 and YYJ126, pylon YYJ127, pylons YYJ125R and YYJ126R, pylon ZB12, pylon to be dismantled ZB13, ZB13RA, temporary pylons YYJ126T and YYJ127T, a pulling location associated with pylon YYJ126R, six SuDS basin locations, temporary attenuation drainage works, the CSE compound on the south-western side of the North Tilbury (related to the ZB/YYJ route) undergrounding cable section, and the temporary haul road. The survey area is located partially within a medium value cropmark complex (**8082**) and a high value cropmark complex (**8084**), which likely represents evidence of late prehistoric into early Romano-British activity, as well as a medium value post medieval field boundary (**8170**) in the eastern extent of the survey area. The geophysical survey of this area has been completed revealing geophysical anomalies representing possible field boundaries and possible field boundaries, plough lines, and natural features.

11.5.316 The seventh priority geophysical survey area covers the route of the Project which includes pylons YYJ128TB, YYJ129 to YYJ130 and ZB8, a pulling location associated with pylon YYJ129 and ZB9, three SuDS basin locations, and the temporary haul road. The survey area is located partially within a low value cropmark complex (**8099**), which likely represents evidence of late prehistoric into early Romano-British activity. The survey area is also partially within an area of low value historic field boundaries (**8171**). The geophysical survey of this area has been completed revealing geophysical anomalies representing field boundaries, field drains, plough lines, natural features, possible archaeology. Asset (**8008**) comprises undated anomalies forming a rectangular feature/possible building, located within the Order Limits but outside areas of known impact and outside asset (**8099**) north-west of pylon YYJ129. This asset is of low value based on its evidential value.

Phase 2 Geophysical Survey

- 11.5.317 Full details of the Phase 2 geophysical results, including a location figure, are provided in Appendix 11.8 - Geophysical Survey (Phase 2) Report (document reference 6.11.A8). A summary of the results is provided in this section, and the progress of the geophysical survey is shown on Figure 11.4: Phase 1 and 2 Geophysical Survey and Archaeological Trial Trenching Priority Areas (Rev C) (document reference 6.11.F4).
- 11.5.318 The Phase 2 geophysical survey in Section H was focused on the temporary haul road, 132kV underground cable, the pylon working areas, and the SuDS basin locations in Thurrock between pylon TB232 at the Thurrock/Basildon border in the north to pylon YYJ130 at the southern limit of the Project. There are some gaps in the data due to: archaeological work (geophysical survey and trial trenching) unrelated to the Project already undertaken (land west of pylons YYJ125 and ZB13); haul road using preexisting track (land west of TB246), a solar farm (TB232); quarrying and landfill (TB257 to TB258); a golf course (TB262); and refused access/unsuitable ground conditions (TB466 to TB252).
- 11.5.319 The Phase 2 geophysical survey of Section H is complete with the exception of the gaps in the collected data noted in the paragraph above. The survey has confirmed and/or expanded known cropmark sites mapped by the Project (**8164**) and the HER (**8049**), adding and confirming predominantly field boundaries across these assets. Across the survey area anomalies indicative of field drains, ploughing, former ponds, magnetic disturbance, and natural variations were also identified. The survey also identified anomalies of 'archaeological', 'possible archaeological' and 'uncertain' origin and where these features fall outside known assets or where they are incongruous with the nature of the asset they fall within, they have been identified as new assets. The new assets identified by the Phase 2 geophysical survey comprise:
- Asset (**8007**) comprises undated 'uncertain origin' anomalies forming the south-west corner of a possible enclosure with a south facing entrance and internal linear features, located within the temporary haul road and SuDS basin immediately north of pylon TB237. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value
 - Asset (**8009**) comprises undated 'uncertain origin' anomalies forming likely field boundaries, located within the temporary haul road and pylon TB235. A non-archaeological origin for this asset cannot be ruled out and so it is of low value based on its evidential value.

Archaeological Trial Trench Survey

- 11.5.320 There are three priority archaeological trial trenching areas located within Section H. The northernmost trenching area, Area 53, corresponds to the portion of the Project covered by the northernmost priority geophysical survey area noted above. The second priority archaeological trial area, Area 54N, covers the route of the Project which corresponds with the fourth priority geophysical survey area noted above. The third priority archaeological trial trenching area covers the route of the Project which includes pylons YYJ124T and YYJ125T, pulling location of YYJ124T, YYJ125T, YYJ123RA and YYJ124RD, temporary and one permanent attenuation drainage works, and two temporary attenuation drainage works, three SuDS basins, temporary construction compounds (ZB-SC01, ZB-SC03 and ZB-CC02) and the temporary haul road, and which corresponds with the fifth priority geophysical survey area noted above. Currently, the trial trenching of this area has not begun.

Area 53

- 11.5.321 Area 53 is located immediately west of Lower Dunton Road on the western outskirts of Basildon. The area encompasses a temporary construction compound (TB-Sate2B), two SuDS basin locations, and the temporary haul road. Sixteen trenches were excavated but all proved to be archaeologically sterile.

Area 54N

- 11.5.322 Area 54N is located north-west of Horford Road, and south of Southfields. The area encompasses the new Tilbury North Substation, pylons TB263, TB264, YYJ123RB, YYJ123RC, YYJ123RD, YYJ124RA, YYJ124RB, and YYJ124RC, temporary and permanent attenuation works, a permanent spoil bund, overhead line crossing protection works, a temporary construction compound (TB-SC08), and the temporary haul road. Ninety-nine trenches were excavated in Area 54N with archaeological remains identified in 18 trenches comprising 14 discrete features and 17 linear features. Dating evidence is limited but two small low value Romano-British pits (**8000**) of evidential value were identified in one trench, whilst the remains of a small medieval enclosure system (**8050**) were identified in the south-west corner of site which corresponds to geophysical anomalies. A denser concentration of archaeological remains was identified in the north-eastern corner of the site where six linear ditches, a ditch terminus, and four pits (**8001**) were identified across three trenches. All these low value features of evidential value remain undated, but the lack of finds suggests the possibility of an early date.
- 11.5.323 Further detail is included in Table 11.2 in relation to further environmental information to be provided.

Geoarchaeological and Palaeoenvironmental Assessment

- 11.5.324 A programme of geoarchaeological monitoring on geotechnical investigation groundworks was undertaken to determine the potential for deposits of geoarchaeological and palaeoenvironmental significance that may be impacted by development. A total of 19 geotechnical investigation interventions were monitored at Tilbury North Substation across arable farmland within a dry valley, detailed in Appendix 11.6: Geoarchaeological and Archaeological Monitoring of Ground Investigation Works Report (document reference 6.11.A6).

- 11.5.325 Modelling revealed a depositional sequence typical for the region comprising very shallow surface accumulations of topsoil directly overlying head across most of the monitored area, with local outcroppings of terrace gravels underlying the topsoil in some locations. Further gravels were recorded beneath head deposits in the north-eastern area.
- 11.5.326 The stratigraphic sequence identified a total of seven units from bedrock to topsoil. The Quaternary stratigraphic sequence across the monitored area was uniform, being 2-3 m in depth above the bedrock.
- 11.5.327 Head deposits were mapped in all but two of the monitored interventions, suggesting that this unit is widely present across the valley. Head is a mass movement deposit of Pleistocene age and can be highly variable in character depending on the nature of the upslope source material. Head, whilst not of significance in and of itself, is a reworked deposit which can seal land surfaces that may contain remains of palaeoenvironmental interest as well as Palaeolithic material.
- 11.5.328 The gravels recorded have been identified as possible Black Park Gravel, the oldest of the Thames Terraces, deposited roughly 400,000 years ago immediately following the retreat of the Anglian Ice Sheet. Whilst artefacts have been recovered from these terraces, they are generally heavily abraded. However, a number of the geotechnical investigations locations recorded terraces directly underlying topsoil, suggesting that these areas are less disturbed (i.e. by head material) and have the greatest potential for the preservation of in situ palaeolithic material. Buried land surfaces were recorded in two of the boreholes and these palaeosols have high geoarchaeological potential.

Future Baseline

- 11.5.329 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).
- 11.5.330 The future baseline has been determined through a consideration of other developments that are consented, submitted applications, and development identified in relevant adopted Development Plans (following the methodology in Chapter 17: Cumulative Effects (document reference 6.17)) within the Historic Environment Study Areas, and assumes the Project is not built. In areas with no other relevant proposed development, the current land and property use has been assumed to continue.
- 11.5.331 Assuming there are no changes in land use, then the condition of any buried archaeological remains would stay as they are currently for an indefinite period within areas of pasture. Within arable fields, it is possible that they may suffer a slow deterioration, given the impacts of periodic deep-ploughing regimes. Equally, features of the historic landscape would remain in their current condition if there were no changes in land use or management regime. In the case of built heritage assets, they would be more susceptible to slow deterioration in their condition, without regular maintenance. However, if they were maintained then they too would be expected to remain in their current condition for an indefinite period.

11.6 Proposed Mitigation

- 11.6.1 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

- 11.6.2 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 heritage assets, as far as reasonably practicable.
- 11.6.3 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.
- 11.6.4 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 Historic Environment include:
- Sensitive routing and siting – Avoid and reduce as far as practicable effects on identified heritage assets. Where specific design alterations have been made to remove or reduce effects on heritage assets these are secured through the Outline CoCP (document reference 7.2) commitment GG34, in which the Project has committed to restricting the movement of specific pylons or infrastructure along the longitudinal Limits of Deviation (LoD).
 - Use of low height pylons for the section of overhead line that passes between Great Waltham conservation area/Langleys registered park and garden and Little Waltham conservation area, to reduce visibility of the alignment from Langleys House and more distant elements of the conservation areas and park and garden.
 - Underground cable – Underground cables are proposed in four locations, including through the Dedham Vale National Landscape. 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. This would also reduce effects on the setting of heritage assets located within the National Landscape, although this would increase the area of potential physical impact for buried archaeology.

Standard Mitigation

- 11.6.5 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.
- 11.6.6 The Outline Code of Construction Practice (CoCP) (document reference 7.2) contains relevant standard/good practice measures relating to the Historic Environment. 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:
- H01: Methodology and processes for archaeological mitigation is specified through the Outline AMS-OWSI (document reference 7.5) to be submitted with the DCO application

- H02: Detailed WSIs shall set out the arrangements and responsibilities for implementing, monitoring and auditing the mitigation measures identified in the Detailed WSIs
- H03: The location of known archaeological remains or areas where archaeological investigations will be undertaken (i.e., excavations) will be signposted/ fenced off to avoid unintentional damage
- H04: Where a previously unknown heritage asset has been discovered, or a known heritage asset has proven to be more significant than foreseen at the time of application, the Project will inform the Local Planning Authority and agree a solution that protects the significance of the new discovery, through preservation or excavation and recording, whichever is practicable within the Project construction requirements
- H05: Local Planning Authority Archaeological Advisors will have access to the Project to monitor and sign-off relevant work. No construction can commence within areas identified for archaeological mitigation without sign off from the relevant Local Planning Authority Archaeological Advisor.
- H06: Where practicable, maintain elements within the landscape such as vegetation, hedgerows, walls and earthworks (such as boundary banks or ditches). Where such features cannot be retained, replacement will be installed as appropriate (including reinstating hedgerows, fences, walls and earthworks).
- H07: Commitment NV04 (see Outline CoCP (document reference 7.2)) will be applied in relation to any designated historic buildings with potential to be impacted by construction vibration.
- H08: Little Bromley War Memorial (**1493299**) and Milestone on east verge approximately 240 metres south of Harts Lane (**1147792**) are grade II listed buildings within the Order Limits. Measures, such as temporary fencing, will be adopted to ensure that no physical impact occurs to these designated heritage assets.

11.6.7 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.

11.6.8 The Outline Landscape and Ecological Management Plan (LEMP) (document reference 7.4) (Rev B) includes measures to protect and reinstate historic landscape features including protected lanes, in addition to the commitment set out in H06 of the Outline CoCP (document reference 7.2).

Additional Mitigation

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

11.6.10 As a result of the assessment within this ES, as defined in Section 11.7, additional mitigation is required. Any mitigation for historic buildings or historic landscapes would be secured through the measures set out in embedded and standard mitigation above.

11.6.11 For archaeology the process, guiding principles and methods for the planning and implementation of additional archaeological mitigation works (and any post-consent

archaeological work) is specified through an Outline AMS-OWSI (document reference 7.5). That document details the types of archaeological mitigation proposed to reduce the effect of the Project on archaeological remains and also presents the approach to engagement and approvals, project management, and the post-excavation analysis and publication stages.

- 11.6.12 Archaeological mitigation measures are secured through Requirement 5 in the Draft DCO (document reference 3.1).

11.7 Residual Effects

- 11.7.1 The likely significant effects of the Project have been assessed using current 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), standard practice, and any additional 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

Section A: South Norfolk Council

- 11.7.2 The construction phase of the Project is predicted to result in a range of effects on heritage assets, including both those assessed as significant and not significant. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.3 The following 15 listed buildings are predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in their setting that affect their values during the construction phase of the Project:
- The high value Grade II* listed 'Flordon Hall' (**1050698**)
 - The medium value Grade II listed 'Kenningham Hall' (**1373056**)
 - The medium value Grade II listed 'Glebe Farmhouse' (**1050442**)
 - The medium value Grade II listed 'Piggery 60 Yards South of Flordon Hall' (**1172231**)
 - The medium value Grade II listed 'Barn to Flordon Hall' (**1373055**)
 - The medium value Grade II listed 'Quaker's Farmhouse' (**1373606**)
 - The medium value Grade II listed 'Manor House' (**1179387**)
 - The medium value Grade II listed 'Manor Farmhouse' (**1049998**)
 - The medium value Grade II listed 'Old Hall' (**1373400**)
 - The medium value Grade II listed 'Heywood Manor' (**1049736**)
 - The medium value Grade II listed 'The Gables' (**1373310**)

- The medium value Grade II listed 'Limetree Farmhouse' (**1373273**)
- The medium value Grade II listed 'The Hermitage' (**1050271**)
- The medium value Grade II listed 'Thatch End and The Haven' (**1154298**).
- The medium value Grade II listed 'Elm Farmhouse' (**1373558**).

11.7.4 One high value scheduled monument, four high value Grade I listed buildings, 25 medium value Grade II listed buildings, and two medium value conservation areas are predicted to experience a **negligible/low magnitude** of impact resulting in a temporary **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the construction phase of the Project.

Non-Designated Heritage Assets

11.7.5 The following medium value non-designated assets are predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the construction phase of the Project:

- The medium value site of the deserted medieval village of Kenningham (**1010**)
- The medium value site of the former moated medieval house (Bush Hall) Waveney Valley (**1013**)
- The medium value site of the medieval moat of Shelfanger (**1024**)
- The medium value site of the Humbleyard Hundred Moor south-west of Swardeston (**1122**)
- The medium value site of a possible Romano-British settlement and Anglo-Saxon cemetery (**1130**)
- The medium value site of multi-period metal detector finds north-east of Tacolneston (**1168**)
- The medium value site of medieval occupation to the east of Mulbarton (**1227**).

11.7.6 One medium value non-designated asset, a cropmark of a ring ditch of a possible barrow north-west of Flordon (**1332**), is predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to physical impacts during construction of the Project.

11.7.7 Another medium value non-designated asset, geophysical anomalies suggesting conjoined enclosures and discrete features (**1391**) located between pylons RG80 and RG81, is predicted to experience a medium adverse magnitude of impact resulting in a permanent moderate adverse residual significance of effect, which is significant, due to physical impacts during construction of the Project

11.7.8 A third value non-designated asset, the site of Romano-British settlement remains (**1364**) located partially within the Order Limits south-east of Swardeston, is predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to both physical impacts and changes in its setting that affects its value during construction of the Project.

- 11.7.9 A further six high value non-designated assets, 20 medium value non-designated assets and one medium value Project mapped cropmark complex non-designated asset are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a temporary **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values, during the construction phase of the Project.
- 11.7.10 No further assets are predicted to experience adverse impacts resulting in residual significant effects during the construction phase of the Project in Section A. As detailed in Appendix 11.2 Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2) there are other non-designated assets of negligible or low value that would experience residual not significant effects due to physical impacts.

Historic Landscape Characterisation

- 11.7.11 Assessment of the historic landscape is included for the construction phase for all Project sections, when impacts such as loss of features and change in land use would occur. With the implementation of mitigation as set out in the Outline CoCP (document reference 7.2) and Outline LEMP (document reference 7.4) historic landscape features would be reinstated where possible following construction and therefore there is not expected to be any new impacts to the historic landscape during operation (and maintenance).
- 11.7.12 There are no impacts to historic landscapes in Section A of the Project which result in significant effects.
- 11.7.13 The HLC of Section A is dominated by negligible/low value HLC types relating to farming practice and the majority of those are very common and post medieval or later in date. The dominant types comprise 18th – 19th century piecemeal enclosure by agreement and 20th century agriculture, which includes 20th century enclosure, boundary loss, and boundary loss with relict elements. The construction phase of the Project would impact these HLC types through the temporary removal of small sections of hedgerow boundary due to the temporary haul roads and other temporary aspects of the Project such as cable undergrounding works, overhead cable line mitigation works and bellmouth works. In the case of farming HLC units, the construction phase would result in a temporary change in land use as farmland would become a construction site. All impacted hedgerow boundaries will be replaced, however, trees beneath overhead cables or above buried cables will not be replaced. Due to the low value of these HLC types and the very small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **negligible/low adverse** resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.
- 11.7.14 Also included in the farming HLC of Section A are less common low value types such as pre-18th century enclosure comprising dual-axis rectilinear coaxial fields and unenclosed common arable, and inland – managed wetland comprising enclosed meadow. These types are sparsely distributed across Section A with the enclosed meadows strongly associated with water courses. This is the case in the Waveney valley where a unit of enclosed meadow flanks the Waveney River and is located partially within the Order Limits. Due to the low value of these HLC types and the small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **low/medium adverse** resulting in a temporary **minor adverse** residual significance of effect, which is **not significant**.

- 11.7.15 The remaining HLC types in Section A that intersect with the Order Limits; woodland, commons/wastes/heaths, industry and modern built-up areas would be minimally impacted by the construction phase of the Project as they are almost entirely outside known areas of impact. Due to the low value of these HLC types and the extremely small proportion of their overall area that is located within the Order Limits, the magnitude of impact is considered to be **negligible adverse** resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.

Section B: Mid Suffolk District Council

- 11.7.16 The construction phase of the Project is predicted to result in a range of effects on heritage assets, including both those assessed as significant and those deemed not significant. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.17 The following scheduled monument and 47 listed buildings are predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in their setting that affect their values during the construction phase of the Project:
- The high value scheduled monument 'Offton Castle' (**1006049**)
 - The high value Grade I listed 'Church of St Mary' (**1231756**)
 - The high value Grade I listed 'Roydon Hall' (**1033215**)
 - The high value Grade I listed 'Barn 30 Metres North West of Roydon Hall' (**1284584**)
 - The medium value Grade II listed 'Spring Farmhouse' (**1180592**)
 - The medium value Grade II listed 'Rookery Farmhouse' (**1352279**)
 - The medium value Grade II listed 'Barn, 40 m South West Of Rookery Farm' (**1180903**)
 - The medium value Grade II listed 'The Dower House' (**1231088**)
 - The medium value Grade II listed 'Barn, 20 Metres South East of Doveshill Farmhouse' (**1231089**)
 - The medium value Grade II listed 'Barn 50 Metres East of Castle Farmhouse' (**1251594**)
 - The medium value Grade II listed 'Valley Farmhouse' (**1250948**)
 - The medium value Grade II listed 'Court Farmhouse' (**1251595**)
 - The medium value Grade II listed 'Park House' (**1032787**)
 - The medium value Grade II listed 'Former Stable Block at St Johns Farm About 15m North of Park House' (**1032788**)
 - The medium value Grade II listed 'Former Groom's House and Coach House About 30 m East of Park House' (**1182135**)

- The medium value Grade II listed 'Gibsons Farm House' (**1181694**)
- The medium value Grade II listed 'Starhouse Farmhouse' (**1352111**)
- The medium value Grade II listed 'Boundary Farmhouse' (**1032244**)
- The medium value Grade II listed 'Lodge Cottage' (**1352504**)
- The medium value Grade II listed 'Mendlesham Hall' (**1180527**)
- The medium value Grade II listed 'Hill Farmhouse' (**1032730**)
- The medium value Grade II listed 'Marsh Farm House' (**1032768**)
- The medium value Grade II listed 'Poplar Farmhouse' (**1182121**)
- The medium value Grade II listed 'Doles Farmhouse' (**1352325**)
- The medium value Grade II listed 'Star Orchard' (**1032663**)
- The medium value Grade II listed 'Firtree Farmhouse' (**1032662**)
- The medium value Grade II listed 'Upper Lonsdales Farmhouse' (**1033189**)
- The medium value Grade II listed 'Garden Wall Enclosing Garden to South Side of Roydon Hall' (**1352074**)
- The medium value Grade II listed 'Hill Farmhouse' (**1182339**)
- The medium value Grade II listed 'Creeting Hall' (**1352073**)
- The medium value Grade II listed 'Cherry Tree Farmhouse' (**1231090**)
- The medium value Grade II listed 'Newton Cottages' (**1277414**)
- The medium value Grade II listed 'College Grove Farmhouse' (**1231093**)
- The medium value Grade II listed 'Bungeons Farmhouse' (**1231581**)
- The medium value Grade II listed 'Home Farmhouse' (**1231443**)
- The medium value Grade II listed 'Moat Farmhouse' (**1231305**)
- The medium value Grade II listed 'Former Stable Range 30 m West of Moat Farmhouse' (**1278293**)
- The medium value Grade II listed 'Hascot Hill Farmhouse' (**1352142**)
- The medium value Grade II listed 'Ringshall House' (**1032952**)
- The medium value Grade II listed 'Rose Cottage Farmhouse' (**1251587**)
- The medium value Grade II listed 'Prospect House' (**1262690**)
- The medium value Grade II listed 'Hill Farmhouse' (**1251696**)
- The medium value Grade II listed 'Grove Farmhouse' (**1262693**)
- The medium value Grade II listed 'Gunn's Farmhouse' (**1262659**)
- The medium value Grade II listed 'Barn 20 Metres South West Of Gunn's Farmhouse' (**1251600**)
- The medium value Grade II listed 'Bleak Hall' (**1251669**)

- The medium value Grade II listed 'The Elms Farmhouse' (**1033217**)
- The medium value Grade II listed 'Hicks Farmhouse' (**1182484**).

11.7.18 Six high value Grade I listed buildings, two high value Grade II* listed buildings, 37 medium value Grade II listed buildings, and two medium value conservation areas are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a temporary **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the construction phase of the Project.

Non-Designated Heritage Assets

11.7.19 The following 33 non-designated assets are predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the construction phase of the Project:

- The medium value site of widespread, dense scatter of Romano-British material likely representative of settlement activity (**2134**)
- The medium value archaeological remains largely representing a late Anglo-Saxon into medieval landscape comprising farmsteads and field systems (**2136**)
- The medium value site of Moat Farm (Barking Farm) Farmstead (**2441**)
- The medium value site of Court Farm (Lost Farm) Farmstead (**2464**)
- The medium value site of Hill Farm Farmstead (**2472**)
- The medium value site of a low earthwork possibly representing the remains of a Bronze Age round barrow (**2037**)
- The medium value remains of a medieval moat (**2241**)
- The medium value remains of a medieval moat (**2248**)
- The medium value site of Park Farm Farmstead (**2368**)
- The medium value site of Squirrells Farm Farmstead (**2400**)
- The medium value site of Castle Farm Farmstead (**2418**)
- The medium value site of Plumtree Farm (also known as College Grove Farm) (**2419**)
- The medium value site of Roydon Hall Farmstead (**2422**)
- The medium value Dewer House/Doves Barn (Doveshill Farm) Farmstead (**2423**)
- The medium value Bungeons Farm Farmstead (**2428**)
- The medium value site of Upper Lonsdales Farmstead (**2429**)
- The medium value Boundary Farm Farmstead (**2431**)
- The medium value site of Highfields Farm or Hascothill Farm Farmstead (**2435**)
- The medium value site of Home Farm Farmstead (**2437**)
- The medium value site of Creeting Hall Farmstead (**2448**)

- The medium value site of Hill Farm Farmstead (**2449**)
 - The medium value site of Hill Farm Farmstead (**2452**)
 - The medium value site of Cottage Farm (rose Cottage Farm) Farmstead (**2462**)
 - The medium value site of Valley Farm Farmstead (**2463**)
 - The medium value site of Grove Farm Farmstead (**2473**)
 - The medium value site of Gunn Farm (Caleygreen Farm) Farmstead (**2476**)
 - The medium value Poplar Farm Farmstead (**2477**)
 - The medium value Firtree Farmhouse Farmstead (**2478**)
 - The medium value Starhouse Farm Farmstead (**2481**)
 - The medium value Spring Farm Farmstead (**2487**)
 - The medium value site of Rookery Farm Farmstead (**2453**)
 - The medium value cropmarks of a medieval circular moat (**2249**)
 - The medium late Anglo-Saxon/medieval landscape comprising farmsteads and field systems (**2316**).
- 11.7.20 One high value non-designated asset, a potential site of possible Mesolithic occupation (**2003**) located east of Wortham and north and south of the A143 Old Bury Road, is predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to physical impacts during construction of the Project.
- 11.7.21 There is potential for significant effects due to physical impact to the medium value site of a medieval L-shaped moat (**2260**) located east of Great Green. However, the **medium adverse** magnitude of impact and **moderate adverse** effect would only occur if burials were identified within the Order Limits. If no burials are encountered, which is considered more likely, the impact is assessed as **low adverse**, resulting in a **minor adverse** effect, which is **not significant**, due to a small area of physical impact and changes within the setting of the asset which would affect its value.
- 11.7.22 Another medium value non-designated asset, the cropmarks of conjoined enclosures and discrete features (**2599**) located between pylons RG193 and RG194, is predicted to experience a medium adverse magnitude of impact resulting in a permanent moderate adverse residual significance of effect, which is significant, due to physical impacts during construction of the Project.
- 11.7.23 A further 39 medium value Suffolk HER assets, one high value Project mapped cropmarks, and three Project identified medium value archaeological farmsteads are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a temporary **minor/negligible adverse** residual significant of effect, which is **not significant**, due to change in their settings that affect their values during the construction of the Project.
- 11.7.24 No further assets are predicted to experience adverse impacts resulting in residual significant effects during the construction phase of the Project in Section B. As detailed in Appendix 11.2 Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2) there are other non-designated assets of negligible or

low value that would experience residual not significant effects due to physical impacts.

Historic Landscape Characterisation

- 11.7.25 There are no impacts to historic landscapes in Section B of the Project which result in significant effects.
- 11.7.26 The HLC of Section B is dominated by negligible/low value HLC types relating to farming practice and the majority of those are very common and post medieval or later in date. The dominant types comprise pre-18th-century enclosure, 18th-century and later enclosure, post-1950 agricultural landscape, and common pasture. The construction phase of the Project would impact these HLC types through the temporary removal of small sections of hedgerow boundary due to the temporary haul roads and other temporary aspects of the Project such as cable undergrounding works, overhead cable line mitigation works and bellmouth works. In the case of farming HLC units, the construction phase would result in a temporary change in land use as farmland would fall within the construction area. All impacted hedgerow boundaries will be replaced, however, trees beneath overhead cables or above buried cables will not be replaced. Due to the low value of these HLC types and the very small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **negligible/low adverse** resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.
- 11.7.27 Also included in the farming HLC of Section B is the less common low value meadow or managed wetland. This type is sparsely distributed across Section B and is strongly associated with water courses. This is the case in the Waveney valley where a unit of meadow or managed wetland flanks the Waveney River and is located partially within the Order Limits. Due to the low value of this HLC type and the small proportion of its overall area that would be impacted by the Project, the magnitude of impact is considered to be **low/medium adverse** resulting in a temporary **minor adverse** residual significance of effect, which is **not significant**.
- 11.7.28 Areas of low value HLC woodland that very slightly intersect with the Order Limits would, if at all, be very minimally impacted by the Project, and so the magnitude of impact is considered to be **negligible adverse** resulting in a temporary **negligible adverse residual** significance of effect, which is **not significant**.

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

- 11.7.29 The construction phase of the Project is predicted to result in a range of effects on heritage assets, including both those assessed as significant and those deemed not significant. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.30 The following scheduled monument is predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in its setting that affect its values during the construction phase of the Project:
- The high value 'Crop Mark Site S of Ardleigh' (**1002146**)
- 11.7.31 The following nine listed buildings are predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** significance of effect, which is **significant**, due to changes in their setting that affect their values during the construction phase of the Project:
- The high value Grade II* listed 'Lowe Hill House' (**1036991**)
 - The high value Grade II* listed 'Church of St Mary' (**1351625**)
 - The medium value Grade II listed 'Birch House Farmhouse' (**1036898**)
 - The medium value Grade II listed 'Higham Hall' (**1036957**)
 - The medium value Grade II listed 'Lark Hall' (**1036983**)
 - The medium value Grade II listed 'Pintins' (**1036984**)
 - The medium value Grade II listed 'Tiffins' (**1036985**)
 - The medium value Grade II listed 'Bounds Farmhouse' (**1147743**)
 - The medium value Grade II listed 'Mulberry House' (**1273800**).
- 11.7.32 One high value scheduled monument, two high value Grade I listed buildings, six high value Grade II* listed buildings, 48 medium value Grade II listed buildings, and two medium value conservation areas are predicted to experience a **negligible/low** magnitude of impact resulting in a temporary **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the construction phase of the Project.

Non-Designated Heritage Assets

- 11.7.33 The following six **medium/high** value non-designated assets are predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the construction phase of the Project:
- The medium value cropmark complex east of Ardleigh (**3233**)
 - The high value cropmark complex west of Stratford St Mary (**3237**)
 - The medium value cropmark complex, located south-east of Langham (**3238**)
 - The medium value Birch Farm Moat (**3042**)
 - The medium value Birch House Farm Farmstead (**3046**)
 - The medium value geophysical anomaly complex west of Sproughton (**3297**).
- 11.7.34 A further 23 medium value Suffolk/Essex/Colchester HER assets are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a temporary **minor/negligible adverse** residual significance of effect, which is **not significant**,

due to changes in their settings that affect their values during the construction phase of the Project.

- 11.7.35 No further assets are predicted to experience adverse impacts resulting in residual significant effects during the construction phase of the Project in Section C. As detailed in Appendix 11.2 Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2) there are other non-designated assets of negligible or low value that would experience residual not significant effects due to physical impacts.

Historic Landscape Characterisation

- 11.7.36 There are no impacts to historic landscapes in Section C of the Project which result in significant effects.
- 11.7.37 The HLC of Section C is dominated by **negligible/low** value HLC types relating to farming practice and the majority of those are very common and post medieval or later in date. The dominant HLC types comprise: pre-18th-century enclosure; 18th-century and later enclosure; and post-1950 agricultural landscape. The construction phase of the Project would impact these HLC types through the temporary removal of small sections of hedgerow boundary due to the temporary haul roads and other temporary aspects of the Project such as cable undergrounding works, overhead cable line mitigation works and bellmouth works. In the case of farming HLC units, the construction phase would result in a temporary change in land use as farmland would fall within the construction area. All impacted hedgerow boundaries will be replaced, however, trees beneath overhead cables or above buried cables will not be replaced. Due to the low value of these HLC types and the very small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **negligible/low adverse** resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.
- 11.7.38 The low value HLC type enclosed meadow or managed wetland is considered to be rare in terms of its presence within the landscape. For the most part, this HLC type within Section C would be minimally impacted as they largely fall outside areas of impact and/or are over-sailed by the Project. In these circumstances the magnitude of impact is considered to be **negligible** resulting in a temporary **negligible** residual significance of impact, which is **not significant**. The exception to this is in the Stour valley where a unit of enclosed meadow which flanks the river would be crossed by cable undergrounding works and trenchless crossing works of the Project. The magnitude of impact in this location is considered to be **medium adverse**, resulting in a temporary **minor adverse** residual significance of effect, which is **not significant**.
- 11.7.39 The remaining HLC types in Section C that intersect with the Order Limits; woodland, water reservoirs, and informal parkland would be minimally impacted by the construction phase of the Project as they are located almost entirely outside known areas of impact. Due to the **low value** of these HLC types and the extremely small proportion of their overall area that is located within the Order Limits, the magnitude of impact is considered to be **negligible adverse**, resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.
- 11.7.40 The horticultural HLC units identified by the Essex HER no longer prescribe to their described function. They are, therefore, not considered further.

Section D: Colchester City Council

- 11.7.41 The construction phase of the Project is predicted to result in a range of effects on heritage assets, including both those assessed as significant and those deemed not significant. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.42 The following 22 listed buildings and one conservation area are predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the construction phase of the Project:
- The high value Grade II* listed 'Barn To South West Of Little Tey House' (**1266779**)
 - The high value Grade II* listed 'Aldham Hall' (**1306270**)
 - The high value Grade II* listed 'Church Of St Margaret And St Catherine' (**1170063**)
 - The high value Grade II* listed 'Chapel Cottage' (**1222607**)
 - The medium value Grade II listed 'Green Farmhouse' (**1170055**)
 - The medium value Grade II listed 'Numbers 1, 2 And 3 Brick Cottages' (**1169966**)
 - The medium value Grade II listed 'Upp Hall' (**1223380**)
 - The medium value Grade II listed 'East Gores Farmhouse' (**1223384**)
 - The medium value Grade II listed 'Barn To North East Of East Gores Farmhouse' (**1223385**)
 - The medium value Grade II listed 'The Old Rectory' (**1224447**)
 - The medium value Grade II listed 'King's Farmhouse' (**1266530**)
 - The medium value Grade II listed 'Knaves Farmhouse' (**1266773**)
 - The medium value Grade II listed 'Range South Of Barn To South Of Knaves Farmhouse' (**1266775**)
 - The medium value Grade II listed 'Barn To South Of Knaves Farmhouse' (**1266822**)
 - The medium value Grade II listed 'Little Tey House' (**1266823**)
 - The medium value Grade II listed 'Cart Lodge To West Of Upp Hall' (**1267339**)
 - The medium value Grade II listed 'Bragg' (**1267411**)
 - The medium value Grade II listed 'Gull Cottage' (**1267412**)
 - The medium value Grade II listed 'Broadgreen Farmhouse' (**1223206**)
 - The medium value Grade II listed 'Langmoor House' (**1274047**)
 - The medium value Grade II listed 'Grapes' (**1306225**)

- The medium value Grade II listed 'Wagon Lodge To North Of Aldham Hall' (**1337391**)
- The medium value 'Fordstreet Conservation Area' (**CA9**).

11.7.43 One high value Grade I listed building, one high value Grade II* listed building and 42 medium value Grade II listed buildings are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a temporary **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the construction phase of the Project.

Non-Designated Heritage Assets

11.7.44 The following 11 non-designated assets are predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the construction phase of the Project:

- The medium value site of Teybrook Farm, Great Tey (cropmark complex) (**4059**)
- The medium value site of the former Boxted WWII Airfield (**4063**)
- The medium value site of East of Fordstreet (cropmark complex) (**4078**)
- The medium value site of excavated Romano-British settlement remains (**4081**)
- The medium value site of cropmarks and geophysical anomalies (**4082**)
- The medium value site of East of Fordham (cropmark complex) (**4088**)
- The medium value site of a cropmark complex (**4102**)
- The medium value site of Brickworks North of Primrose House/Colliers Brick Works (**4197**)
- The medium value medieval moat near Brook Road (**4072**)
- The medium value historic farmstead Knaves Farm, Marks Tey (**4217**)
- The medium value historic farmstead Teybrook Farm, Great Tey (**4225**).

11.7.45 Another medium value non-designated asset, the site of a cropmark complex (**4107**) located immediately west of the A12 and south of Langham, is predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to both physical impacts and changes in its setting that affects its value during construction of the Project.

11.7.46 A further medium value non-designated asset, the site of a Romano-British farmstead confirmed by geophysical survey and trial trenching (**4050**), is predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to physical impacts during construction of the Project.

11.7.47 A further three medium value Project identified archaeological assets are predicted to experience a **low adverse** magnitude of impact resulting in a temporary **minor adverse** residual significant of effect, which is **not significant**, due to change in their settings that affect their values during the construction of the Project.

- 11.7.48 No further assets are predicted to experience adverse impacts resulting in residual significant effects during the construction phase of the Project in Section D. As detailed in Appendix 11.2 Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2) four medium value non-designated assets would experience neutral and not significant effects, as the assets no longer exist, and there are other non-designated assets of negligible or low value that would experience residual not significant effects due to physical impacts.

Historic Landscape Characterisation

- 11.7.49 There are no impacts to historic landscapes in Section D of the Project which result in significant effects.
- 11.7.50 The HLC of Section D is dominated by **negligible/low** value HLC types relating to farming practice and the majority of those are very common and post medieval or later in date. The dominant types comprise pre-18th-century enclosure, 18th-century and later enclosure, post-1950 agricultural landscape. The construction phase of the Project would impact these HLC types through the temporary removal of small sections of hedgerow boundary due to the temporary haul roads and other temporary aspects of the Project such as cable undergrounding works, overhead cable line mitigation works and bellmouth works. In the case of farming HLC units, the construction phase would result in a temporary change in land use as farmland would fall within the construction area. All impacted hedgerow boundaries will be replaced, however, trees beneath overhead cables or above buried cables will not be replaced. Due to the low value of these HLC types and the very small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **negligible/low** adverse resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.
- 11.7.51 The low value HLC type enclosed meadow, or managed wetland is considered to be rare in terms of its presence within the landscape. This type is sparsely distributed across Section D and is strongly associated with water courses. Due to the low value of this HLC type and the small proportion of its overall area that would be impacted by the Project, the magnitude of impact is considered to be **low adverse** resulting in a temporary **minor adverse** residual significance of effect, which is **not significant**.
- 11.7.52 In Section D the Project passes through the Coln Valley. The HLC types encountered in the Coln Valley area, which intersect the Order Limits, include 20th century boundary loss, 18th to 19th century piecemeal agreement and irregular enclosure, 18th to 19th century woodland plantation, and enclosed meadow. Due to the low value of these HLC types and the very small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **negligible/low adverse** resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.
- 11.7.53 The remaining HLC types in Section D that intersect with the Order Limits; Horticultural, woodland, water reservoirs, and informal parkland would be minimally impacted by the construction phase of the Project as they are located almost entirely outside known areas of impact. Due to the low value of these HLC types and the extremely small proportion of their overall area that is located within the Order Limits, the magnitude of impact is considered to be **negligible adverse**, resulting in a temporary **negligible adverse residual** significance of effect, which is **not significant**.

Section E: Braintree District Council

- 11.7.54 The construction phase of the Project is predicted to result in a range of effects on heritage assets, including both those assessed as significant and those deemed not significant. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.55 The following listed building is predicted to experience a **high adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in its settings that affect its value during the construction phase of the Project:
- The medium value Grade II listed Pound Farmhouse (**1123812**).
- 11.7.56 The following 32 listed buildings are predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in their setting that affect their values during the construction phase of the Project:
- The high value Grade II* listed 'Houchin's Farmhouse' (**1123187**)
 - The high value Grade II* listed 'Feeringbury Manor' (**1306710**)
 - The high value Grade II* listed 'Ancillary Building 6 m South East of Feeringbury Manor' (**1123828**)
 - The medium value Grade II listed 'Waterwheel and Mounting Approximately 23 m South West of Feeringbury Manor' (**1337602**)
 - The medium value Grade II listed 'Barn of Feeringbury Farm, 60 m South East of Feeringbury Manor' (**1123829**)
 - The medium value Grade II listed 'The Stores' (**1146812**)
 - The medium value Grade II listed 'The Herons' (**1337781**)
 - The medium value Grade II listed 'Ford Farmhouse and Ford Farmhouse Barn' (**1122614**)
 - The medium value Grade II listed 'Porter's Farmhouse' (**1171011**)
 - The medium value Grade II listed 'Newneys Farmhouse' (**1123450**)
 - The medium value Grade II listed 'Barn Approximately 10 m South-East of Newneys Farmhouse' (**1337819**)
 - The medium value Grade II listed 'Dines Hall' (**1123448**)
 - The medium value Grade II listed 'Oak Farnhouse' [sic] (**1123422**)
 - The medium value Grade II listed 'Oak Cottages' (**1123421**)
 - The medium value Grade II listed 'Westocks Farmhouse' (**1168106**)
 - The medium value Grade II listed 'Farm Outbuilding Approximately 10 m East of Westcocks Farmhouse' (**1122745**)

- The medium value Grade II listed Granary 'Approximately 20 m South of Westcocks Farmhouse' (**1168121**)
- The medium value Grade II listed 'Great Warley Hall' (**1123449**)
- The medium value Grade II listed 'Barn Approximately 40m West-South-West of Great Warley Hall' (**1248834**)
- The medium value Grade II listed 'Barn Approximately 40 m South-West of Great Warley Hall' (**1337818**)
- The medium value Grade II listed 'Cockerell's Farmhouse and Bakehouse' (**1169484**)
- The medium value Grade II listed 'Coggeshall Hall Farmhouse' (**1306737**)
- The medium value Grade II listed 'Barn 20 Metres North West of Coggeshall Hall Farmhouse' (**1123869**)
- The medium value Grade II listed 'The Old Cottage' (**1123839**)
- The medium value Grade II listed 'Hungry Hall Farmhouse' (**1123868**)
- The medium value Grade II listed 'Rook Hall' (**1170991**)
- The medium value Grade II listed 'Homecot' (**1146765**)
- The medium value Grade II listed 'Pond Cottage' (**1123455**)
- The medium value Grade II listed 'Hill Farmhouse' (**1123461**)
- The medium value Grade II listed 'Forge Cottage' (**1338147**)
- The medium value Grade II listed 'Hole Farmhouse' (**1146854**)
- The medium value Grade II listed 'Post House' (**1123423**).

11.7.57 A further two high value scheduled monuments, six high value Grade I listed buildings, two high value Grade II* listed buildings, and 14 medium value Grade II listed buildings are predicted to experience **negligible/low adverse** magnitudes of impact resulting in a temporary **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the construction phase of the Project.

Non-Designated Heritage Assets

11.7.58 The following four medium value non-designated assets are predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the construction phase of the Project:

- The Rivenhall Place designed parkland landscape (**5036**)
- The moated site at Great Walley Hall (**5020**)
- The moated site at Dines Hall (**5044**)
- A late 17th to early 18th century timber framed barn on Porters Farm (**5073**).

11.7.59 A high value non-designated asset, the site of cropmarks (**5132**) within the area surrounding a long mortuary enclosure and round barrow scheduled monument

(1017230), is predicted to experience a **low adverse** magnitude of impact resulting in a temporary **minor adverse** residual significance of effect, which is **not significant**, due to changes in its setting that affect its value during the construction phase of the Project.

- 11.7.60 A further nine medium value non-designated assets are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a temporary **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the construction phase of the Project.
- 11.7.61 No further assets are predicted to experience adverse impacts resulting in residual significant effects during the construction phase of the Project in Section E. As detailed in Appendix 11.2 Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2) there are other non-designated assets of negligible or low value that would experience residual not significant effects due to physical impacts.

Historic Landscape Characterisation

- 11.7.62 There are no impacts to historic landscapes in Section E of the Project which result in significant effects.
- 11.7.63 The HLC of Section E is largely characterised by negligible/low value HLC types relating to farming practice and the majority of those are very common and post medieval or later in date. The dominant types comprise 20th century agriculture, including boundary loss, 20th century enclosure and boundary loss with relict elements. The construction phase of the Project would impact these HLC types through the temporary removal of small sections of hedgerow boundary due to the temporary haul roads and other temporary aspects of the Project such as cable undergrounding works, overhead cable line mitigation works and bellmouth works. In the case of farming HLC units, the construction phase would result in a temporary change in land use as farmland would become a construction site. All impacted hedgerow boundaries will be replaced, however, trees beneath overhead cables or above buried cables will not be replaced. Due to the low value of these HLC types and the very small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **negligible/low adverse**, resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.
- 11.7.64 Also included in the farming HLC are other occasional low value types, such as pre-18th agriculture, which includes irregular enclosure, irregular sinuous enclosure and coaxial enclosure, as well 18th and 19th century piecemeal by agreement and formal style parliamentary enclosure. Due to the low value of these HLC types and the small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **low/medium adverse**, resulting in a temporary **minor adverse residual** significance of effect, which is **not significant**.
- 11.7.65 Inland managed wetlands are found within Section E, comprising several fields of enclosed meadow HLC type. The distribution of these enclosed meadows is across the length of the Order Limits through Section E, within the flood plain of nearby rivers. Due to the low value of these HLC types and the very small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **negligible/low adverse**, resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.

- 11.7.66 The remaining HLC types in Section E that intersect with the Order Limits; water reservoir, informal parkland, 18th – 19th century woodland plantation, ancient woodland, industry, mineral extraction, leisure/recreation and modern built up areas, would be minimally impacted by the construction of the Project and so the magnitude of impact on these HLC types is considered to be **negligible adverse**, resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.

Section F: Chelmsford City Council

- 11.7.67 The construction phase of the Project is predicted to result in a range of effects on heritage assets, including both those assessed as significant and those deemed not significant. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.68 The following Grade II listed building is predicted to experience a **high adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in its setting that affect its value during the construction phase of the Project:
- The medium value Grade II listed 'Balls Farmhouse' (**1305428**).
- 11.7.69 The following six medium value Grade II listed buildings and one medium value registered park and garden are predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the construction phase of the Project:
- The medium value registered park and garden 'Langleys' (**1000241**)
 - The medium value Grade II listed 'Granary and Cart Lodge at Southwoods Farm' (**1237420**)
 - The medium value Grade II listed 'Barn at Southwoods Farm' (**1237421**)
 - The medium value Grade II listed 'Newney Hall' (**1237228**)
 - The medium value Grade II listed 'Sturgeons House' (**1237071**)
 - The medium value Grade II listed 'Southwoods' (**1237174**)
 - The medium value Grade II listed 'Barn Immediately North-West of Coptfoldhall Farmhouse' (**1247784**).
- 11.7.70 One high value Grade I listed building, three high value Grade II* listed buildings, 60 medium value Grade II listed buildings, one high value scheduled monument and two medium value conservation areas are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a temporary **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the construction phase of the Project.

Non-Designated Heritage Assets

- 11.7.71 The following five medium value non-designated assets are predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the construction phase of the Project:
- The medium value site of cropmarks of two ring ditches with internal features and linear ditches (**6007**)
 - A cropmark complex suggestive of formal parkland features and agricultural activity (**6038**)
 - A cropmark complex suggestive of settlement and enclosure activity (**6193**)
 - A cropmark complex suggestive of a Romano-British temple (**6062**)
 - An artefact scatter suggestive of a Romano-British building (**6109**).
- 11.7.72 A further eight medium value and one high value Essex HER assets are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a temporary **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the construction phase of the Project.
- 11.7.73 One medium value HER asset is anticipated to experience **no change** in magnitude of impact, resulting in a **neutral** residual effect, which is **not significant**, as alterations to its setting during the construction phase of the Project would not affect its value.
- 11.7.74 No further assets are predicted to experience adverse impacts resulting in residual significant effects during the construction phase of the Project in Section F. As detailed in Appendix 11.2 Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2) there are other non-designated assets of negligible or low value that would experience residual not significant effects due to physical impacts.

Historic Landscape Characterisation

- 11.7.75 There are no impacts to historic landscapes in Section F of the Project which result in significant effects.
- 11.7.76 The HLC of Section F is largely characterised by negligible/low value HLC types relating to farming practice and the majority of those are very common and post medieval or later in date. The dominant types comprise 20th century agriculture, including boundary loss, 20th century enclosure and boundary loss with relict elements. The construction phase of the Project would impact these HLC types through the temporary removal of small sections of hedgerow boundary due to the temporary haul roads and other temporary aspects of the Project such as cable undergrounding works, overhead cable line mitigation works and bellmouth works. In the case of farming HLC units, the construction phase would result in a temporary change in land use as farmland would become a construction site. All impacted hedgerow boundaries will be replaced, however, trees beneath overhead cables or above buried cables will not be replaced. Due to the low value of these HLC types and the very small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **negligible/low adverse**,

resulting in a temporary **negligible adverse residual** significance of effect, which is **not significant**.

- 11.7.77 Also included in the farming HLC are other occasional low value types, such as pre-18th agriculture, which includes irregular enclosure, irregular sinuous enclosure and unenclosed arable, as well 18th and 19th century piecemeal by agreement. Due to the low value of these HLC types and the small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **low/medium adverse**, resulting in a temporary **minor adverse** residual significance of effect, which is **not significant**.
- 11.7.78 This is similar around Great Waltham and Little Waltham, where a mix of boundary loss, 20th century enclosure and piecemeal by agreement is seen. A single parcel of land of a water reservoir HLC type is also seen between Great Waltham and Little Waltham, but this is of negligible value. The magnitude of impact is considered to be **negligible/low adverse**, resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.
- 11.7.79 Inland managed wetlands are found within Section F, comprising several fields of enclosed meadow HLC type. The distribution of these enclosed meadows is across the Order Limits in Section F, which can be found bordering the watercourse of the river valley. A small proportion of these fields, eight of them, are affected by the Project. Due to the low value of these HLC types and the very small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **negligible/low adverse**, resulting in a temporary **negligible adverse residual** significance of effect (**not significant**).
- 11.7.80 The remaining HLC types in Section F that intersect with the Order Limits; woodland, ancient woodland, industrial, mineral extraction, disused mineral extraction, leisure/recreation and modern built up areas, would be minimally impacted by the construction of the Project and so the magnitude of impact on these HLC types is considered to be **negligible adverse**, resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.

Section G: Brentwood Borough Council and Basildon Borough Council

- 11.7.81 The construction phase of the Project is predicted to result in a range of effects on heritage assets, including both those assessed as significant and those deemed not significant. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.82 The following 13 listed buildings and one conservation area are predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the construction phase of the Project:
- The high value Grade II* listed 'Church of St Mary' (**1264434**)
 - The high value Grade II* listed 'Ingatestone [bridge] Over the River Wid (That Part in Brentwood District)' (**1207790**)
 - The medium value Grade II listed 'Wardropers Farmhouse' (**1293259**)

- The medium value Grade II listed 'Ellices' (**1297247**)
- The medium value Grade II listed 'Stable and coach house at Hutton House' (**1197242**)
- The medium value Grade II listed 'Hutton House' (**1279616**)
- The medium value Grade II listed 'Sudbury's Farmhouse' (**1170946**)
- The medium value Grade II listed 'Botney Hill Farmhouse' (**1322862**)
- The medium value Grade II listed 'Wayletts' (**1121459**)
- The medium value Grade II listed 'Church of St Mary' (**1122253**)
- The medium value Grade II listed 'Dunton Hall' (**1338380**)
- The medium value Grade II listed 'Margaretting Hall' (**1152104**)
- The medium value Grade II listed 'White's Tyrrells Farmhouse' (**1236733**)
- The medium value 'Hutton Village Conservation Area' (**CA17**).

11.7.83 A further two high value scheduled monuments, two high value Grade I listed buildings, four high value Grade II* listed buildings, 11 medium value Grade II listed buildings and one medium value conservation area are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a temporary **minor/negligible adverse** residual significance of effect which is **not significant**, due to changes in their settings that affect their values during the construction phase of the Project.

11.7.84 A medium value Grade II listed building is predicted to experience a **low beneficial** magnitude of impact resulting in a temporary **minor beneficial** residual significance of effect, which is **not significant**, due to changes in its setting that affects its value during the construction phase of the Project.

Non-Designated Heritage Assets

11.7.85 Three medium value non-designated assets are predicted to experience a **negligible/ low adverse** magnitude of impact resulting in a temporary **minor/negligible adverse** residual significance of effect, which is **not significant**, due to physical change to the assets during construction and changes in their settings that affect their values during the construction phase of the Project.

11.7.86 Two medium value non-designated assets would experience a **low adverse** magnitude of impact resulting in a temporary **minor adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the construction phase of the Project.

11.7.87 No further assets are predicted to experience adverse impacts resulting in residual significant effects during the construction phase of the Project in Section G. As detailed in Appendix 11.2 Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2) there are other non-designated assets of negligible or low value that would experience residual not significant effects due to physical impacts.

Historic Landscape Characterisation

- 11.7.88 There are no impacts to historic landscapes in Section G of the Project which result in significant effects.
- 11.7.89 The HLC of Section G is largely characterised by negligible/low value HLC types relating to farming practice and the majority of those are very common and post medieval or later in date. The dominant types comprise 20th century agriculture, which includes boundary loss, 20th century enclosure and boundary loss with relict elements. The construction phase of the Project would impact these HLC types through the temporary removal of small sections of hedgerow boundary due to the temporary haul roads and other temporary aspects of the Project such as cable undergrounding works, overhead cable line mitigation works and bellmouth works. In the case of farming HLC units, the construction phase would result in a temporary change in land use as farmland would become a construction site. All impacted hedgerow boundaries will be replaced, however, trees beneath overhead cables or above buried cables will not be replaced. Due to the low value of these HLC types and the very small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **negligible/low adverse**, resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.
- 11.7.90 Also included in the farming HLC of Section G are less common low value types, such as pre-18th agriculture, which includes irregular enclosure, irregular sinuous enclosure and dual axis, rectilinear 'co-axial fields', as well 18th and 19th century piecemeal by agreement. These types are sparsely distributed across Section G. The construction phase of the Project would impact these HLC types through the temporary removal of small sections of hedgerow boundary due to the temporary haul roads and other temporary aspects of the Project such as cable undergrounding works, overhead cable line mitigation works and bellmouth works. In the case of farming HLC units, the construction phase would result in a temporary change in land use as farmland would become a construction site. All impacted hedgerow boundaries will be replaced, however, trees beneath overhead cables or above buried cables will not be replaced. Due to the low value of these HLC types and the small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **low/medium adverse** resulting in a temporary **minor adverse** residual significance of effect, which is **not significant**.
- 11.7.91 The remaining HLC types in Section G that intersect with the Order Limits; 18th to 20th century woodland plantation, leisure/recreation, industry, informal parkland, a water reservoir and modern built-up areas, would be minimally impacted by the construction phase of the Project as they are almost entirely outside known areas of impact. Due to the low value of these HLC types and the extremely small proportion of their overall area that is located within the Order Limits, the magnitude of impact is considered to be **negligible adverse**, resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.

Section H: Thurrock Council

- 11.7.92 The construction phase of the Project is predicted to result in a range of effects on heritage assets, including both those assessed as significant and those deemed not significant. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.93 The following scheduled monument and four listed buildings are predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect which is **significant**, due to changes in their settings that affect their values during the construction phase of the Project:
- The high value scheduled monument 'Causewayed enclosure and Anglo-Saxon cemetery 500m ENE of Heath Place' (**1009286**)
 - The medium value Grade II listed 'Saffron Garden' (**1111557**)
 - The medium value Grade II listed 'Walls at Saffron Garden' (**1111558**)
 - The medium value Grade II listed 'Wyfields Farmhouse' (**1337057**)
 - The medium value Grade II listed 'Barn to north of Wyfields Farmhouse' (**1111646**).
- 11.7.94 The following conservation area is predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect which is **significant**, due to changes in its setting that affect its values during the construction phase of the Project:
- The high value 'West Tilbury Conservation Area' (**CA28**).
- 11.7.95 Two high value scheduled monuments, two high value Grade II* listed buildings, and twelve medium value Grade II listed buildings are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a temporary **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the construction phase of the Project.

Non-Designated Heritage Assets

- 11.7.96 The following high/medium value assets are predicted to experience a **medium adverse** magnitude of impact resulting in a temporary **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the construction phase of the Project:
- A medium value cropmark complex, located south of Horndon-on-the-Hill (**8049**)
 - A medium value cropmark complex, located east of Chadwell St Mary (**8082**)
 - A high value cropmark complex, located east of Chadwell St Mary (**8084**)
 - A medium value cropmark complex, located north-east of Chadwell St Mary (**8087**)
 - A medium value cropmark complex, located north of Chadwell St Mary (**8294**).
- 11.7.97 Another medium value non-designated asset, cropmarks of two ring ditches (**8155**) located north of Chadwell Saint Mary, is predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to both physical impacts and changes in its setting that affects its value during construction of the Project.

- 11.7.98 A further six high/medium value Essex HER assets are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a temporary **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the construction phase of the Project.
- 11.7.99 No further assets are predicted to experience adverse impacts resulting in residual significant effects during the construction phase of the Project in Section H. As detailed in Appendix 11.2 Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2) there are other non-designated assets of negligible or low value that would experience residual not significant effects due to physical impacts.

Historic Landscape Characterisation

- 11.7.100 There are no impacts to historic landscapes in Section H of the Project which result in significant effects.
- 11.7.101 The HLC of Section H is largely characterised by negligible/low value HLC types relating to farming practice, and the majority of those are very common and post medieval or later in date. The Order Limits passes through a landscape largely defined by low value areas of post 1950s boundary loss, which is common within the landscape. The construction phase of the Project would impact these HLC types through the temporary removal of small sections of hedgerow boundary due to the temporary haul roads and other temporary aspects of the Project such as cable undergrounding works, overhead cable line mitigation works and bellmouth works. In the case of farming HLC units, the construction phase would result in a temporary change in land use as farmland would become a construction site. All impacted hedgerow boundaries will be replaced, however, trees beneath overhead cables or above buried cables will not be replaced. Due to the low value of these HLC types and the very small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **negligible/low adverse**, resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.
- 11.7.102 Also included in the farming HLC are other occasional low value types, such as dual-axis coaxial fields, 20th century enclosure, boundary loss – with relict elements, and piecemeal enclosure with agreement. These types are distributed in three clusters: along the northern half of the section, directly north-east of Grays, and south of the A1013. The construction phase of the Project would impact these HLC types through the temporary removal of small sections of hedgerow boundary due to the temporary haul roads and other temporary aspects of the Project such as cable undergrounding works, overhead cable line mitigation works and bellmouth works. In the case of farming HLC units, the construction phase would result in a temporary change in land use as farmland would become a construction site. All impacted hedgerow boundaries will be replaced, however, trees beneath overhead cables or above buried cables will not be replaced. Due to the low value of these HLC types and the small proportion of their overall area that would be impacted by the Project, the magnitude of impact is considered to be **low/medium adverse**, resulting in a temporary **minor adverse** residual significance of effect, which is **not significant**.
- 11.7.103 A negligible value orchard intersects the Order Limits, north-west of Linford. The impact on this HLC unit is low and, so there is a negligible significance of effect. The remaining HLC types in Section H that intersect with the Order Limits; woodland,

ancient woodland, industry, mineral extraction, disused mineral extraction, leisure/recreation and modern built up areas, would be minimally impacted by the construction of the Project and so the magnitude of impact on these HLC types is considered to be **negligible adverse**, resulting in a temporary **negligible adverse** residual significance of effect, which is **not significant**.

Operation (and Maintenance)

Section A: South Norfolk Council

- 11.7.104 The operation (and maintenance) phase of the Project is predicted to have the following effects on the stated heritage assets. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.105 The following two listed buildings are predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project:
- The high value Grade II* listed 'Flordon Hall' (**1050698**)
 - The medium value Grade II listed 'Heywood Manor' (**1049736**).
- 11.7.106 Another high value scheduled monument, four high value Grade I listed buildings, 38 medium value Grade II listed buildings and two medium value conservation areas would experience a **negligible/low adverse** magnitude of impact resulting in a permanent **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.

Non-Designated Heritage Assets

- 11.7.107 The following eight non-designated assets are predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project:
- The medium value site of the deserted medieval village of Kenningham (**1010**)
 - The medium value site of the former moated medieval house (Bush Hall) Waveney Valley (**1013**)
 - The medium value site of the medieval moat of Shelfanger (**1024**)
 - The medium value site of the Humbleyard Hundred Moor south-west of Swardeston (**1122**)
 - The medium value site of a possible Romano-British settlement and Anglo-Saxon cemetery (**1130**)
 - The medium value site of multi-period metal detector finds north-east of Tacolneston (**1168**)
 - The medium value site of medieval occupation to the east of Mulbarton (**1227**)

- The medium value site of Romano-British archaeological settlement remains **(1364)**.

- 11.7.108 A further six high value Norfolk HER assets, 21 medium value Norfolk HER assets, one medium value Project mapped cropmark complex, and one medium value geophysical anomaly complex are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a permanent **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.
- 11.7.109 No further non-designated assets are predicted to experience adverse impacts resulting in residual significant or not significant effects during the operation phase of the Project in Section A.

Section B: Mid Suffolk District Council

- 11.7.110 The operation (and maintenance) phase of the Project is predicted to have the following effects on the stated heritage assets. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.111 The following 11 listed buildings are predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect which is **significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project:
- The medium value Grade II listed 'Court Farmhouse' **(1251595)**
 - The medium value Grade II listed 'Hill Farmhouse' **(1032730)**
 - The medium value Grade II listed 'Poplar Farmhouse' **(1182121)**
 - The medium value Grade II listed 'Doles Farmhouse' **(1352325)**
 - The medium value Grade II listed 'Star Orchard' **(1032663)**
 - The medium value Grade II listed 'Firtree Farmhouse' **(1032662)**
 - The high value Grade I listed 'Roydon Hall' **(1033215)**
 - The high value Grade I listed 'Barn 30 Metres North West of Roydon Hall' **(1284584)**
 - The medium value Grade II listed 'Hill Farmhouse' **(1182339)**
 - The medium value Grade II listed 'Creeping Hall' **(1352073)**
 - The medium value Grade II listed 'Bleak Hall' **(1251669)**.
- 11.7.112 Another high value scheduled monument, seven high value Grade I listed buildings, two high value Grade II* listed buildings, 72 medium value Grade II listed buildings and two medium value conservation areas would experience a **negligible/low adverse** magnitude of impact resulting in a permanent **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.

- 11.7.113 Five medium value Grade II listed buildings and one high value Grade I listed building are predicted to experience a **low beneficial** magnitude of impact resulting in a permanent **minor beneficial** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project

Non-Designated Heritage Assets

- 11.7.114 The following non-designated assets are predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project:
- The medium value site of widespread, dense scatter of Romano-British material likely representative of Romano-British settlement activity (**2134**)
 - The medium value archaeological remains largely representing a late Anglo-Saxon into medieval landscape comprising farmsteads and field systems (**2316**)
 - The medium value site of Court Farm (Lost Farm) Farmstead (**2464**)
 - The medium value remains of a medieval moat (**2241**)
 - The medium value site of Creting Hall Farmstead (**2448**)
 - The medium value site of Hill Farm Farmstead (**2449**)
 - The medium value site of Hill Farm Farmstead (**2452**)
 - The medium value site of Roydon Hall Farmstead (**2422**).
- 11.7.115 A further 51 medium value Suffolk HER assets, one high value Suffolk HER asset, one medium value Project mapped cropmark complex, three medium value Project identified archaeological assets, and medium value geophysical anomaly complex are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a permanent **low/minor/negligible** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.
- 11.7.116 Three medium value Suffolk HER assets are predicted to experience a **low beneficial** impact resulting in a permanent **minor beneficial** residual significance of effect (**not significant**) due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.
- 11.7.117 No further non-designated assets are predicted to experience adverse impacts resulting in residual significant or not significant effects during the operation phase of the Project in Section B.

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

- 11.7.118 The operation (and maintenance) phase of the Project is predicted to have the following effects on the stated heritage assets. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.119 The following listed building is predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to changes in its settings that affect its value during the operation (and maintenance) phase of the Project:
- The medium value Grade II listed 'Bounds Farmhouse' (**1147743**).
- 11.7.120 Another high value scheduled monument, two high value Grade I listed buildings, five high value Grade II* listed buildings, 43 medium value Grade II listed buildings and two medium value conservation areas would experience a **negligible/low adverse** magnitude of impact resulting in a permanent **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.

Non-Designated Heritage Assets

- 11.7.121 Eight medium value Suffolk/Essex HER assets and one medium value geophysical anomaly complex are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a permanent **minor/ negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.
- 11.7.122 A further 18 medium/high value Suffolk/Essex HER assets are predicted to experience **no change** resulting in a permanent **neutral** residual significance of effect, which is **not significant**, due to no changes in their settings that affect their values during the operation (and maintenance) phase of the Project.
- 11.7.123 A further two medium value Suffolk HER assets are predicted to experience a **low beneficial** impact resulting in a permanent **minor beneficial** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.
- 11.7.124 No further non-designated assets are predicted to experience adverse impacts resulting in residual significant or not significant effects during the operation phase of the Project in Section C.

Section D: Colchester City Council

- 11.7.125 The operation (and maintenance) phase of the Project is predicted to have the following effects on the stated heritage assets. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.126 The following 11 listed buildings and one conservation area are predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project:
- The medium value Grade II listed 'Numbers 1, 2 And 3 Brick Cottages' (**1169966**)
 - The medium value Grade II listed 'The Old Rectory' (**1224447**)

- The medium value Grade II listed 'King's Farmhouse' (**1266530**)
 - The medium value Grade II listed 'Knaves Farmhouse' (**1266773**)
 - The medium value Grade II listed 'Range South Of Barn To South Of Knaves Farmhouse' (**1266775**)
 - The medium value Grade II listed 'Barn To South Of Knaves Farmhouse' (**1266822**)
 - The medium value Grade II listed 'Little Tey House' (**1266823**)
 - The high value Grade II* listed 'Barn To South West Of Little Tey House' (**1266779**)
 - The high value Grade II* listed 'Aldham Hall' (**1306270**)
 - The medium value Grade II listed 'Wagon Lodge To North Of Aldham Hall' (**1337391**)
 - The high value Grade II* listed 'Church Of St Margaret And St Catherine' (**1170063**)
 - The medium value 'Fordstreet Conservation Area' (**CA9**).
- 11.7.127 One high value Grade I and 32 medium value Grade II listed buildings are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a permanent **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.
- 11.7.128 One Grade II* and 31 Grade II listed buildings are predicted to experience **no change** in magnitudes of impact resulting in a **neutral** residual significance of effect, which is **not significant**, as alterations to their settings during the operation (and maintenance) phase of the Project would not affect their values.

Non-Designated Heritage Assets

- 11.7.129 The following seven non-designated assets are predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse residual** significance of effect, which is **significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project:
- The medium value site of the former Boxted WWII Airfield (**4063**)
 - The medium value site of excavated Romano-British settlement remains (**4081**)
 - The medium value site of cropmarks and geophysical anomalies (**4082**)
 - The medium value site of a cropmark complex (**4102**)
 - The medium value site of a cropmark complex (**4107**)
 - The medium value site of Brickworks North of Primrose House/Colliers Brick Works (**4197**)
 - The medium value medieval moat near Brook Road (**4072**).
- 11.7.130 Five medium value HER assets are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a permanent **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their

settings that affect their values during the operation (and maintenance) phase of the Project.

- 11.7.131 A further four medium value non-designated HER assets, and two Project identified archaeological assets are anticipated to experience **no change** in magnitude of impact, resulting in a **neutral** residual significance of effect, which is **not significant**, as alterations to their settings during the operation (and maintenance) phase of the Project would not affect their values.
- 11.7.132 No further non-designated assets are predicted to experience adverse impacts resulting in residual significant or not significant effects during the operation phase of the Project in Section D.

Section E: Braintree District Council

- 11.7.133 The operation (and maintenance) phase of the Project is predicted to have the following effects on the stated heritage assets. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.134 The following three listed buildings are predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project:
- The medium value Grade II listed 'Dines Hall' (**1123448**)
 - The medium value Grade II listed 'Cockerell's Farmhouse and Bakehouse' (**1169484**)
 - The medium value Grade II listed 'Pound Farmhouse' (**1123812**).
- 11.7.135 A further two high value scheduled monuments, six high value Grade I listed buildings, five high value Grade II* listed buildings, and 38 medium value Grade II listed buildings are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a permanent **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.
- 11.7.136 A further two medium value Grade II listed buildings are predicted to experience a **low beneficial** magnitude of impact resulting in a permanent **minor beneficial** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.

Non-Designated Heritage Assets

- 11.7.137 One high value and 12 medium value Essex HER assets are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a permanent **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.

- 11.7.138 One medium value Essex HER asset is predicted to experience a **no change** magnitude of impact resulting in a permanent **neutral** residual significance of effect, which is **not significant**, during the operation (and maintenance) phase of the Project.
- 11.7.139 No further non-designated assets are predicted to experience adverse impacts resulting in residual significant or not significant effects during the operation phase of the Project in Section E.

Section F: Chelmsford City Council

- 11.7.140 The operation (and maintenance) phase of the Project is predicted to have the following effects on the stated heritage assets. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.141 The following three medium value Grade II listed buildings and one medium value registered park and garden are predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is significant, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project:
- The medium value Grade II listed 'Balls Farmhouse' (**1305428**)
 - The medium value Grade II listed 'Granary and Cart Lodge at Southwoods Farm' (**1237420**)
 - The medium value registered park and garden 'Langleys' (**1000241**)
 - The medium value Grade II listed 'Barn at Southwoods Farm' (**1237421**).
- 11.7.142 One high value Grade I listed building, three high value Grade II* listed buildings, 64 medium value Grade II listed buildings, one high value scheduled monument, and two medium value conservation areas are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a permanent **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.

Non-Designated Heritage Assets

- 11.7.143 The following medium value non-designated assets are predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project:
- A cropmark complex suggestive of settlement and enclosure activity (**6193**)
 - A cropmark complex suggestive of a Romano-British temple (**6062**)
 - An artefact scatter suggestive of a Romano-British building (**6109**).
- 11.7.144 A further two high value and eight medium value Essex HER assets are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a permanent **minor/negligible adverse** residual significance of effect, which is **not significant**,

due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.

- 11.7.145 Another medium value HER asset is anticipated to experience **no change** in magnitude of impact, resulting in a **neutral** residual significance of effect, which is **not significant**, as alterations to their settings during the operation (and maintenance) phase of the Project would not affect their values.
- 11.7.146 No further non-designated assets are predicted to experience adverse impacts resulting in residual significant or not significant effects during the operation phase of the Project in Section F.

Section G: Brentwood Borough Council and Basildon Borough Council

- 11.7.147 The operation (and maintenance) phase of the Project is predicted to have the following effects on the stated heritage assets. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.148 The following six medium value Grade II listed buildings are predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project:
- The medium value Grade II listed 'Botney Hill Farmhouse' (**1322862**)
 - The medium value Grade II listed 'Church of St Mary' (**1264434**)
 - The medium value Grade II listed 'Church of St Mary' (**1122253**)
 - The medium value Grade II listed 'Dunton Hall' (**1338380**)
 - The medium value Grade II listed 'Margaretting Hall' (**1152104**)
 - The medium value Grade II listed 'White's Tyrrells Farmhouse' (**1236733**).
- 11.7.149 A further two high value scheduled monuments, two high value Grade I listed buildings, three high value Grade II* listed buildings, 19 medium value Grade II listed buildings and two medium value conservation areas are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a permanent **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.

Non-Designated Heritage Assets

- 11.7.150 Five non-designated assets are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a permanent **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.
- 11.7.151 No further non-designated assets are predicted to experience adverse impacts resulting in residual significant or not significant effects during the operation phase of the Project in Section G.

Section H: Thurrock Council

- 11.7.152 The operation (and maintenance) phase of the Project is predicted to have the following effects on the stated heritage assets. Full details of the assessment for all assets are presented in Appendix 11.2: Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2).

Designated Heritage Assets

- 11.7.153 The following two medium value listed buildings are predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project:
- The Grade II listed 'Barn to north of Wyfields Farmhouse' (**1111646**)
 - The Grade II listed 'Wyfields Farmhouse' (**1337057**).
- 11.7.154 A further 12 medium value Grade II listed buildings, two high value Grade II* listed buildings, one high value conservation area and four high value scheduled monuments are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a permanent **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.
- 11.7.155 Three medium value Grade II listed buildings would experience a magnitude of impact of **no change**, resulting in a **neutral** residual significance of effect, which is **not significant**.

Non-Designated Heritage Assets

- 11.7.156 The following three non-designated assets are predicted to experience a **medium adverse** magnitude of impact resulting in a permanent **moderate adverse** residual significance of effect, which is **significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project:
- A medium value cropmark complex, located east of Chadwell St Mary (**8082**)
 - A medium value cropmark complex, located north-east of Chadwell St Mary (**8087**)
 - The medium value cropmarks of two ring ditches, located north of Chadwell St Mary (**8155**).
- 11.7.157 A further six Essex HER assets are predicted to experience a **negligible/low adverse** magnitude of impact resulting in a permanent **minor/negligible adverse** residual significance of effect, which is **not significant**, due to changes in their settings that affect their values during the operation (and maintenance) phase of the Project.
- 11.7.158 No further non-designated assets are predicted to experience adverse impacts resulting in residual significant or not significant effects during the operation phase of the Project in Section H.

11.8 Monitoring

Construction

- 11.8.1 Archaeological and built heritage mitigation, including protection measures for built heritage assets and preservation in situ of archaeological remains, non-intrusive archaeological fieldwork and intrusive archaeological fieldwork would be undertaken during pre-construction works or prior to the aspects of construction that would affect the heritage asset. These mitigation works would be monitored to ensure compliance with the Outline AMS-OWSI (document reference 7.5) and relevant Detailed WSI to ensure works are undertaken to appropriate standards.

Operation (and Maintenance)

- 11.8.2 For any heritage assets retained within National Grid ownership, management plans would be prepared, and would include requirements for monitoring.

11.9 Sensitivity Testing

- 11.9.1 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.
- 11.9.2 The conclusions of the sensitivity testing would also apply to the assessment presented in Appendix 11.7 Assessment of Harm to Designated Heritage Assets (document reference 6.11.A7).

Flexibility in Construction Programme

- 11.9.3 This chapter assumes the base construction schedule described in Chapter 4: Project Description (document reference 6.4) for the purposes of the assessment. Sensitivity testing considering alternative Project phasing, such as a later construction start date, has shown that there would be no new or different likely significant effects to those identified in the baseline scenario assessed in Section 11.7. This is because the condition and number of heritage assets would not be expected to change within the likely construction start date range.

Flexibility in Design

Flexibility within the Limits of Deviation

- 11.9.4 The assessment presented within Section 11.7, Appendix 11.2 Historic Environment Assessment Tables (Rev C) (document reference 6.11.A2) and Appendix 11.7 has been undertaken 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). It should be noted that 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 have been

made otherwise. The LoDs have been assessed through appropriate sensitivity testing. Table 11.6 lists the elements of flexibility and the assumptions considered in the assessment.

- 11.9.5 Alternative locations could change the assessment for this chapter in relation to physical impacts and impacts through change to setting that affect the value of a heritage asset. All elements of construction working areas that break ground have implications for physical impacts to heritage assets, and pylon positions would have implications for the settings of heritage assets.

Table 11.6 Flexibility assumptions

Element of Flexibility	Assumption for Initial Assessment	Flexibility Assumptions Considered
Lateral LoD for proposed overhead line (perpendicular to proposed overhead line)	As depicted on the Works Plans (document reference 2.3).	The Study Areas for Historic Environment are set from the Order Limits and therefore the baseline accounts for this LoD. The assessment in this chapter and its appendices has considered the potential effects of locating pylons or conductors anywhere within the 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 Study Areas for Historic Environment are set from the Order Limits and therefore the baseline accounts for this LoD. Specific commitments in the Outline CoCP (document reference 7.2) restrict this LoD in particularly sensitive locations for heritage assets. The assessment in this chapter and its appendices has considered the reasonable worst case potential effects of locating pylons or conductors anywhere within this LoD.
Vertical LoD for pylons (and conductors)	As depicted on the Works Plans (document reference 2.3).	The assessment in this chapter and its appendices 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	The assessment was undertaken based on the maximum parameters shown on the Works Plans (document reference 2.3) and Elevation Drawings (document reference 2.7).	The Study Areas for Historic Environment are set from the Order Limits and therefore the baseline accounts for this LoD. The assessment in this chapter and its appendices has considered the potential effects of lateral and longitudinal LoD proposed for new substations.
Vertical LoD for proposed new substations and	As depicted on the Elevation Drawings	The assessment in this chapter and its appendices has considered the potential effects of an increase in the heights as shown

Element of Flexibility	Assumption for Initial Assessment	Flexibility Assumptions Considered
modifications to existing substations	(document reference 2.7).	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 Study Areas for Historic Environment are set from the Order Limits and therefore the baseline accounts for this LoD. The assessment in this chapter and its appendices has considered the potential effects of lateral and longitudinal LoD proposed for CSE compounds.
Vertical LoD for proposed CSE compounds	As depicted on the Elevation Drawings (document reference 2.7).	The assessment in this chapter and its appendices has considered the potential effects of an increase in the heights as shown on the Elevation Drawings (document reference 2.7).
Lateral LoD for proposed underground cables	As depicted on the Works Plans (document reference 2.3).	The Study Areas for Historic Environment are set from the Order Limits and therefore the baseline accounts for this LoD. The assessment in this chapter and its appendices has considered the potential effects of moving the proposed underground cable within the lateral LoD, typically up to 50 m either side of the proposed construction swathe.
Lateral LoD for removal and undergrounding of existing 132 kV overhead lines	The assessment was undertaken based on the parameters depicted on the Works Plans (document reference 2.3).	The Study Areas for Historic Environment are set from the Order Limits and therefore the baseline accounts for this LoD. The assessment in this chapter and its appendices has considered the potential effects of undergrounding within the LoD. The removal of existing 132 kV overhead lines is not expected to cause any new adverse effects to heritage assets.
Lateral LoD for removal and undergrounding 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).	The Study Areas for Historic Environment are set from the Order Limits and therefore the baseline accounts for this LoD. The assessment in this chapter and its appendices has considered the potential effects of undergrounding within the LoD. The removal of existing 33 and 11 kV overhead lines is not expected to cause any new adverse effects to heritage assets.

Flexibility within the Order Limits

- 11.9.6 There are 19 locations where design scenarios have been identified within Chapter 4: Project Description (document reference 6.4). The effects of the design scenarios on heritage assets in comparison with the Project have been assessed below. Those that would result in different effects from those reported in this chapter are set out.

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

- 11.9.7 The alternative route for the haul roads would physically impact a greater area of asset (1089) which is the sites of the deserted medieval/ post medieval settlements of Rattongate and Haliards south-south-east of Tacolneston. However, the works would still impact a small proportion of the overall asset and therefore this would not alter the magnitude of impact or minor adverse effect, which is **not significant**. Therefore this alternative would not result in any additional significant effects

Silica Sands Mineral Site west of the proposed new EACN Substation (Section C)

- 11.9.8 The swapping of the locations of the undergrounded cable with the overhead line would cause physical impact to a greater proportion of asset (**3218**) which is a cropmark complex south-south-east of Ardleigh (south of Little Bromley Road). The undergrounding would not physically impact the scheduled monument cropmark complex (**1002146**) which this asset encompasses. However, as the underground cable works would still impact a small proportion of the asset, and cause no physical impact to the associated scheduled monument, this alternative would not result in any change to the magnitude of impact and the significance of effect would remain **minor adverse**, which is **not significant**.

Mineral Extraction site north-west of Kelvedon (Section E)

- 11.9.9 The overhead line would be closer to the listed The Clock House (**1305802**) and Felix Hall (**1123797**) to the south. While this would place pylons closer to these listed buildings the pylons are already assessed as being in close proximity and within their settings, resulting in minor adverse effects, which are not significant, during construction and operation (and maintenance). However, this alternative would not alter the magnitude of impact and would not therefore result in any additional significant effects.

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

- 11.9.10 Should an alternative alignment be required within the widened LoD and Order Limits, the overhead line would be noticeably closer to the listed Longs Farmhouse (**1171557**). The listed building would be approximately 200 m from a pylon and the magnitude of impact during construction is likely to increase from low to medium. This would increase the significance of effect during construction from minor to moderate adverse, and will represent a significant effect. During operation (and maintenance) it would remain a low magnitude of impact, therefore, the significance of effect during operation (and maintenance) would remain unchanged. The impact through change to setting is assessed to be greater during construction as the change in land use and movement of machinery is considered to be a greater change than the presence of the overhead line during operation (and maintenance), as which point surrounding land would have been reinstated to agriculture.

Southfields Development south of the A1013 (Section H)

- 11.9.11 The LoD and Order Limits have been widened between TB255 and TB259 to allow flexibility for an alternative alignment if the Southfields housing development does not go ahead. The current alignment does not affect any known extant heritage assets. If the alternative were constructed it would physically impact a slightly greater area of an archaeological site, at Orsett-Collingwood Farm, south-east of Southfields which

is made up of undated linear and other features (**8104**). However, as the alignment would only affect a small additional proportion of the total remains the magnitude of impact and **negligible adverse** effect would not change and would remain **not significant**.

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

- 11.9.12 There are archaeological remains within both routes to the south of the River Stour. Should a single crossing be constructed, either the eastern or western alternatives, this would reduce effects in this area by reducing the amount of archaeology physically impacted by construction, which would reduce significant effects in comparison to two crossings.

Tilbury North Access at the proposed new Tilbury North Substation (Section H)

- 11.9.13 The eastern change borders an archaeological site recorded as 'Mucking-Linford-Holford Wood Road-Rainbow Shaw Pits', an Early Iron Age settlement (**8032**). The western change borders another archaeological site 'Mucking Heath linear feature; ditch; ring ditch; trackway; rectangular enclosure', an undated site (**8046**). The current assessment assumes that impacts within the working area for LTC would occur and so any physical impacts to archaeological remains in this area would only occur once, as a result of whichever project is constructed first. The alternatives would not alter the impacts due to change to the settings of any listed buildings.

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

- 11.9.14 The alternative involves standard height pylons in this area, therefore the only potential change in impacts to cultural heritage assets would be through change to setting. Asset (**8016**) is a WWII bombing decoy which encompasses the scheduled monument 'Bulphan World War II bombing decoy, 850 m and 890 m south-west of Doesgate Farm' (**1020998**), and is located adjacent to and partly within the Order Limits. The magnitude of impact to its significance resulting from changes to its setting has been assessed as low, giving a minor adverse significance of effect. The alternative would not change this. The listed Ongar Hall (**1337060**) and the listed timber framed barn at Ongar Hall (**1111650**) located to the west of the Order Limits would not experience any change from the **negligible** magnitude of impact and **negligible** significance of effect already reported. The pylons would be largely screened by the small industrial park to the east of these assets.

Temporary construction compounds (Section G/H)

- 11.9.15 The alternative considered is 'Option 2' – a compound at Lower Dunton Road, near TB233, Basildon (TB-Sate2B), as opposed to the 'Option 1' compound (near TB223) (TB-Sate2A) that has already been assessed. There are no recorded archaeological remains close to either option so the only changes might be to setting. There are no known archaeological assets within either option and both options are similar distances from Grade II listed buildings. Option 2 would not introduce any new significant effects as construction work would be located closer to Lower Dunton Hall (**1111583**) than the compound, and therefore this would not change the magnitude of impact or effect for this heritage asset.

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

- 11.9.16 The use of standard height pylons in the section south of the River Chelmer would reduce the number of pylons by one in this section but they would be c. 10 m taller than the current design. It is expected that the taller pylons would be visible from a greater proportion of Langleys (**1000241**) registered park and garden, Great Waltham Conservation Area and Little Waltham Conservation Area. The conservation areas are assessed to experience minor, not significant, effects and Langleys registered park and garden is assessed to experience a moderate and significant effect. It is not expected this would change as a result of this design scenario as these assessments already consider the clear visibility of the pylons from the closest edges of the assets. It is not expected that the standard height pylons would change the visibility or effect for Langleys (**1305533**) house.

Abbreviations

Abbreviation	Full Reference
AONB	Area of Outstanding Natural Beauty
AMS	Archaeology Mitigation Strategy
AMS – OWSI	Archaeological Mitigation Strategy – Outline Written Scheme of Investigation
ATT	Archaeological Trial Trenching
CA	Conservation Area
CIfA	Chartered Institute for Archaeologists
CoCP	Code of Construction Practice
CPRSS	Corridor Preliminary Routeing and Substation Siting Study
CSE	Cable Sealing End
DESNZ	Department for Energy Security and Net Zero
DCO	Development Consent Order
DMRB	Design Manual for Roads and Bridges
EACN	East Anglia Connection Node
EIA	Environmental Impact Assessment
ELC	European Landscape Convention
ES	Environmental Statement
GI	Ground Investigation
ICCROM	International Centre for the Study of the Preservation and Restoration of Cultural Property
ICOMOS	International Council on Monuments and Sites
IUCN	International Union for Conservation of Nature
IEMA	Institute of Environmental Management and Assessment
IHBC	Institute of Historic Building Conservation
HER	Historic Environment Record
HLC	Historic Landscape Characterisation
HLT	Historic Landscape Type
HLU	Historic Landscape Units

Abbreviation	Full Reference
LiDAR	Light Detection and Ranging
LoD	Limit of Deviation
LTC	Lower Thames Crossing
LVIA	Landscape and Visual Impact Assessment
OHL	Overhead Lines
OL	Order Limits
OS	Ordnance Survey
OWSI	Overarching Written Scheme of Investigation
NPS	National Policy Statement
PAS	Portable Antiquities Scheme
PEIR	Preliminary Environmental Information Report
PRoW	Public Right of Way
SoCG	Statements of Common Ground
SuDS	Sustainable Drainage System(s)
UNESCO	United Nations Educational, Scientific and Cultural Organization
WSI	Written Scheme of Investigation
WWII	World War Two
ZTV	Zone of Theoretical Visibility

Glossary

Term	Description
Baseline	Reference to the report which identifies, describes, and collates the historic environment resource identified from desk-based sources, walkover, and setting survey within the Order Limits and defined Study Areas for the Project.
Conservation Area (CA)	An area of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance as defined in Section 69(1)(a) in the Planning (Listed Building and Conservation Areas) Act 1990.
Cropmark	Evidence of the presence of sub-surface archaeological remains through the differential growth in a crop.
Consultation(s)	Meeting(s) with stakeholders, councils, the client, and the public that are required to be conducted at different stages of the Project prior to decision making, to discuss the potential impacts made by the Project on designated and non-designated heritage assets within the Order Limits and Study Areas.
Environmental Impact Assessment (EIA)	An assessment of the likely effects of a development project on the environment, which is reported in an Environmental Statement that is publicised and consulted on and taken into account in the decision on whether a project should proceed.
Environmental Statement (ES)	The main output from the EIA process, an ES is the report required to accompany an application for development consent (under the Infrastructure Planning (EIA) Regulations 2017) to inform public and stakeholder consultation and the decision on whether a project should be allowed to proceed. The EIA Regulations set out specific requirements for the contents of an ES for Nationally Significant Infrastructure Projects.
Designated Heritage Asset	Assets which have been attributed certain degrees of importance, that include listed buildings, World Heritage Sites, registered parks and gardens, scheduled monuments, and conservation areas.
Geophysical Survey	A non-destructive survey method in which specialist equipment is used to map subsurface features and conditions by measuring the physical properties of the earth. The imagery produced through this survey provides valuable information in the form of charted data and images that are then analysed and interpreted by a specialist.
Historic buildings	Architectural, designed, or other structures with a significant historical value. These may include structures that have no aesthetic appeal or structures not usually thought of as buildings, such as milestones or bridges.

Term	Description
Historic Environment Record	Information services that seek to provide access to comprehensive and dynamic resources relating to the historic environment of a defined geographic area for public benefit and use.
Impact(s)	The degree of change to the asset and its setting caused by the Project and which is graded through the magnitude of impact criteria.
Listed building	A measure of a building's special architectural and historic interest. There are three categories of listed buildings, Grade I, II* and II depending on the level of interest.
Non-Designated Heritage Asset	Assets such as buildings, objects, monuments, sites, places, areas, and landscapes, and information from the Historic Environment Record that are recognised by local authorities as having heritage significance but that aren't protected formally by law like a designated heritage asset it. Non-designated heritage assets are values for their contribution to the character and identity of the locality, and their historical, architectural, artistic, and/or archaeological interest.
Registered park and garden	A park or garden included on Historic England's Register of Historic Parks and Gardens. Sites are graded I, II* or II like listed buildings.
Scheduled monument	An historic building or site whose heritage interest is nationally important, that is included in the Schedule of Monuments kept by the Secretary of State for Culture, Media and Sport. Covered by the Ancient Monuments and Archaeological Areas Act 1979.
Scoping Opinion	A document which informs the scope of the EIA for the Project.
Setting	The surroundings in which a heritage asset or landscape designation is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.
Setting Survey	The desk-based and on-site assessment of the setting of scoped-in designated and non-designated heritage assets that are or may be impacted by the Project. This survey assesses physical, audible and visual impacts to the asset's setting that could be affected by the Project.
Significance	The collective term for the sum of all the heritage values that are attached to a place (e.g. a building, archaeological site, larger historic area, etc.) which is then assessed.
Site Walkover	The on-site assessment by members of the cultural heritage team of the scoped-in areas of land and assets that are in the Order Limits and Study Area, and that are impacted by the Project. The assessment aims to confirm or discover any unrecorded heritage assets, land use, land type, field boundaries, modern disturbance, and hazards that are within the vicinity of the Order Limits and Study Areas.

Term	Description
Study Area	The Study Area is a set distance of search parameters (250 m to 3 km) based on professional judgement, and which provides historical context of the historical environment within these set distances.
Value	A descriptor of the importance of a heritage asset which derives from the asset's ability to illustrate one of more of the Conservation Principles (Historic England, 2008).

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National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com